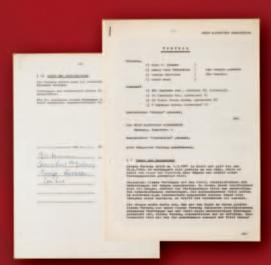
FINANCIAL HISTORY

THE MAGAZINE OF THE MUSEUM OF AMERICAN FINANCE



"Worth Its Weight: Gold from the Ground Up" Exhibit Opens Berkshire Hathaway 50th Anniversary Digital Gold: Reinventing Money in the 21st Century

The World Leader in Rare Coins & Currency, Heritage delivers so much more with 40 Auction Categories!



The first recording contract ever signed by The Beatles, which put the Fab Four on a path that would change music history, sold for \$93,750 during Heritage Auctions' \$1.3+ million weekend Entertainment and Music Memorabilia Auction Sept. 19-20 in New York.

A 1792 Copper Disme, one of the most storied coins in American Numismatics, realized \$211,500 as the top offering of more than \$23 million sold in Heritage Auctions' Sept. 17-20 Long Beach Expo U.S. Coins Signature® Auction.



Mickey Mantle proved himself the undisputed king of post-war baseball memorabilia on July 30, 2015, as a PSA-graded 8 example of his Topps 1952 #311 rookie card realized \$382,400 and a 1966 Game Worn New York Yankees Jersey realized \$322,650 to lead Heritage Auctions' \$6.1+ million Platinum Night® Sports offerings at the National Sports Collectors Convention in Chicago.

Achieve the highest prices and best marketing when you sell your art, collectibles and jewelry through Heritage Auctions.

Consider donating all or a portion of the proceeds to the Museum of American Finance and receive excellent tax benefits!

Arms & Armor • American Art • European Art • Art of the American West • American Indian Art • Americana & Political Rare Books • California Art • Civil War & Militaria • US Rare Coins • Comics & Comic Art • Animation Art • Rare Currency Entertainment & Music Memorabilia • Furniture & Decorative Arts • Vintage Guitars & Musical Instruments • Illustration Art • Fine Jewelry Lalique & Art Glass • Handbags & Luxury Accessories • Historical Manuscripts • Fine Minerals • Modern & Contemporary Art Vintage Movie Posters • Nature & Science • Photographs • Fine Silver & Vertu • Space Exploration • Sports Collectibles • Texana • Texas Art 20th Century Design • Watches & Fine Timepieces • Fine & Rare Wine • World & Ancient Coins • Luxury Real Estate • Intellectual Property

For a free consultation, contact Mark Prendergast, Director of Trusts & Estates

MPrendergast@HA.com | 877 HERITAGE (437-4824) ext. 1632

East Coast Showroom Now Open For Your Convenience | 445 Park Avenue | New York NY 10022

THE WORLD'S LARGEST COLLECTIBLES AUCTIONEER

DALLAS | NEW YORK | BEVERLY HILLS | SAN FRANCISCO | CHICAGO | PARIS | GENEVA | HONG KONG
Always Accepting Quality Consignments in 40 Categories
Immediate Cash Advances Available
900,000+ Online Bidder-Members





Genealogy of American Finance
Robert E. Wright and Richard Sylla

Purchase your copy at www.moaf.org/newbook

Genealogy of American Finance

By Robert E. Wright and Richard Sylla

Foreword by Charles M. Royce

"Genealogy of American
Finance is a treasure trove
of information on American
banking and its history, in
an unusual — and unusually
useful — format."

— John Steele Gordon, author of Empire of Wealth

An immersive history of 50 major American banks and their transformation of the nation into a leading world power.

In this gorgeously illustrated hardcover book — published by the Museum of American Finance and Columbia Business School Publishing — readers learn how 50 financial corporations came to dominate the US banking system, shaping the nation's political, social and economic growth along the way. A story that spans more than two centuries of war, crisis and exciting promise, this account reminds readers that American banking was never a fixed enterprise but has evolved in tandem with the fits and starts of the country. A key text for navigating the complex terrain of American finance, this volume draws a fascinating family tree for projecting the future of a nation.





NANCIAL

THE MAGAZINE OF THE MUSEUM OF AMERICAN FINANCE

in association with the Smithsonian Institution

Issue 115 • Fall 2015

(ISSN 1520-4723)

Kristin Aguilera

Editor

EDITORIAL ADVISORY BOARD

Howard A. Baker, Esq.

Howard Baker Associates

Brian Grinder

Eastern Washington University

Gregory DL Morris

Freelance Journalist

Arthur W. Samansky

The Samansky Group

Bob Shabazian

American Stock Exchange (ret.)

Myles Thompson

Columbia Business School Publishing

Robert E. Wright

Augustana University

Jason Zweig

The Wall Street Journal

EDITOR EMERITAE

Diana E. Herzog

ART DIRECTION Alan Barnett Design

MUSEUM STAFF

David J. Cowen, President/CEO Kristin Aguilera, Deputy Director Sarah Buonacore, Collections Manager Tony Critelli, Accountant Jeanne Driscoll, Director of Development Maura Ferguson, Director of Exhibits Arturo Gomez, Business Manager Chris Meyers, Director of Education Linda Rapacki, Managing Director of Visitor Services and Operations Mindy Ross, Director, External Relations

Copyright 2015 by the Museum of American Finance, publisher, 48 Wall Street, New York, NY 10005. Telephone: 212-908-4110; fax: 212-908-4601. All rights reserved.

Financial History is the official membership magazine of the Museum of American Finance. Annual individual membership is \$55. Payment must be made in dollars, by credit card or check payable to the Museum of American Finance.





IN THIS ISSUE

FEATURES

Missed It by That Much

The California Gold Rush and a pivot of history.

- By Gregory DL Morris
- 16 Warren Buffett and Wall Street: The Best of Frenemies

Examining Buffett's relationship with Wall Street on the 50th anniversary of his leadership of Berkshire Hathaway.

- By Lawrence A. Cunningham
- 20 William Jennings Bryan and the "Cross of Gold" Speech

Presidential candidate and noted orator makes history with his speech at the 1896 Democratic Convention.

- By Ron Hunka
- **Digital Gold**

Reinventing money in the 21st century.

- By Nathaniel Popper
- The Fed's Paternity

Paul Warburg and Carter Glass may be considered reluctant co-fathers of the Federal Reserve.

- By Edward L. Morris
- 30 **Showing True Mettle**

Starting as a scrap operator in 1915, Commercial Metals celebrates a century.

- By Gregory DL Morris
- A Deluxe Centennial

The Deluxe Corporation survives 100 years through strong leadership and innovation.

By Bart Ward

IN THIS ISSUE

DEPARTMENTS

4 The Ticker

"Worth Its Weight: Gold from the Ground Up" exhibit features hundreds of rare and unique gold objects from collections around the country.

- 4 Message to Members
 - ▶ By David Cowen, President and CEO
- 10 Educators' Perspective

How Hen Fever Led to the Chicken of Tomorrow: Part 2

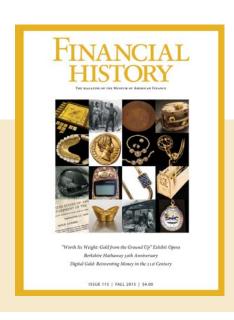
- By Dan Cooper and Brian Grinder
- 38 Book Review

Wall Street Wars: The Epic Battles With Washington that Created the Modern Financial System, by Richard E. Farley.

- Reviewed by Michael A. Martorelli
- 39 Trivia Quiz

ON THE COVER

Objects featured in the "Worth Its Weight: Gold from the Ground Up" exhibit, opening November 19. See photo spread, page 6.



TRUSTEES

Richard Sylla, Chairman New York University

Andrea de Cholnoky, *Vice Chair*Golden Seeds

Robert Muccilo, Treasurer Consolidated Edison

Alvi Abuaf

Gregory Bauer

Moody's

Marcy Cohen

ING Financial Holdings

David J. Cowen, *President/CEO*Museum of American Finance

Sanford Crystal

Crystal & Company

John P. Davidson III

Citiaroup

Randolph DelFranco

Holland & Knight

Charles Elson

University of Delaware

Niall Ferguson

Harvard University, Oxford University

Adam Goldstein

vettery

Cory Gunderson

Protiviti

Martha Clark Goss

American Water Works

Robert Hotz

Houlihan Lokey

Alfred F. Hurley, Jr.

Emigrant Bank

Myron Kandel

CNN

Glenn Kaufman

Kaufman Family LLC

Bradford Kopp

Financial Services Executive

Kirkpatrick MacDonald MacDonald & Cie

Consuelo Mack

.Onsueio ivia

WealthTrack

Marge Magner
Brysam Global Partners, LLC

Richard B. Payne, Jr.

IIS Bancorn

Edward J. Rappa

R. W. Pressprich & Co.

Verne O. Sedlacek Financial Services Executive

Karen Seitz

Fusion Partners

Mark Shenkman Shenkman Capital Management, Inc.

David L. Shuler

Shuler Advisory Services

Kevin Shine

Shine Financial Services

Andrew Soussloff

Sullivan & Cromwell

Ewout Steenbergen

Voya Financial

Susan Stupin

Prescott Group

Charles WaitThe Adirondack Trust Company

John E. Herzog, *Chairman and Trustee* Emeritus Herzog & Co.

Financial History Goes Digital

This issue of Financial History magazine coincides with two major events: the longanticipated opening of the Museum's gold exhibit, "Worth Its Weight: Gold from the Ground Up," on November 19 and the 50th anniversary of Warren Buffett's leadership of Berkshire Hathaway, which will be marked with an important value investor symposium at the Museum on

We also continue to increase the size of our Board, and we welcome three new Trustees this fall. John Davidson III is the chief compliance officer at Citibank and serves on its Executive Committee. Marge Magner is managing partner of Brysam Global Partners, LLC and spent 20 years at Citibank, where she was chair and CEO of its Global Consumer Business. Karen Seitz

> is the founder and managing director of Fusion Partners, having previously been at Goldman Sachs, where she was a partner.

> The Vice Chair of our Board, Andrea de Cholnoky,

will represent our Museum at the annual meeting of the International Federation of Finance Museums (IFFM) in Beijing from October 29 through November 1. The Chinese Museum of Finance is hosting this year's conference and will showcase some 21 different finance museums from around the world in their grand exhibition hall. We are honored to represent the United States with a kiosk and exhibition area in which we will showcase a reproduction of our "America in Circulation" exhibition, featuring the collection of Mark R. Shenkman. Andrea will attend the conference and will work with our counterparts from around the globe. There will be many highprofile speakers at the conference, including the head of the Chinese central bank.

This has been a very busy season for the Museum, with our new gold exhibit opening and a first-rate roster of speakers and programs. As we head towards the holiday giving season, we ask you again to assist us in your year-end philanthropy so that we can continue to provide you with these wonderful programs. \$



Message to Members David J. Cowen | President and CEO

November 11. It is also significant because with this issue we have launched a digital edition. We will publish this issue and the next in print, but we expect to phase out the print edition eventually and move to an all-digital format.

There are many benefits to digital publishing, including the potential to reach a much wider audience; to enhance content through embedded links; and to showcase objects, documents and photographs from the Museum's unique collection in full color. At the same time, it will be a tremendous savings in both production and distribution costs in this ever-difficult fundraising environment.

For some, like me (who still reads several newspapers a day and really enjoys a hard copy), this change may be difficult at first, but it is time the Museum changes with the world around us. What will not change is the same outstanding content that our editor and editorial board will provide; the magazine remains one of the crown jewels of the Museum.



The digital edition of Financial History will be available in full color and can be found at www.moaf.org/financialhistory.



OCT 5

Daimler-Benz becomes the first German company to be listed on the New York Stock Exchange.

Paul Volcker becomes chairman of the Federal Reserve.

MoAF and Vested Reach Milestone with Communications Executives Advisory Panel

THIS FALL MARKS the first anniversary of the Museum's Communications Executives Advisory Panel, which brings together communications and marketing leaders from America's top financial institutions. The panel serves as a forum to collaborate with the Museum as it pursues closer ties with, and opportunities to add greater value to, the Wall Street community. The panel is co-chaired by Museum President David Cowen and Dan Simon, CEO of the Wall Street communications firm Vested.

A primary mission of the panel is to assist in developing topical and engaging programming, such as the "Bitcoin and the Future of Payment Systems" event featuring former Secretary of the Treasury Lawrence Summers and the "Going Public?" program featuring NYSE President Tom Farley. The Advisory Panel also serves as an invaluable networking opportunity for its members across the various sectors of the financial services industry. Membership on the Communications Executives Advisory Panel is by invitation only, and meetings are held quarterly in the Museum's Grand Mezzanine exhibit hall.

Participating firms and organizations include Accenture, AIG, Bank of America, Betterment, Bloomberg, Broadridge, Capco, CME Group, Credit Suisse, Deutsche Asset Management, DTCC, Enso Financial

Analytics, the Federal Reserve of New York, Financial Communications Society, First Investors Corporation, Goldman Sachs, Gramercy Institute, ING, Macquarie Bank, Mastercard, MetLife, Moody's, Morgan Stanley, MUFG Union Bank, New York Life, New York Stock Exchange, Oppenheimer, PineBridge Investments, Protiviti, Rockefeller & Co., Roundtable Partners, Santander, S&P Dow Jones, UBS Americas and Voya.

More information on the Museum's Communications Executives Advisory Panel can be found at www.moaf.org/advisorypanel. \$



Dan Simon, CEO of Vested, leads a discussion at a recent meeting of the Communications Executives Advisory Panel.



Bill Wreaks of the Gramercy Institute participates in a roundtable discussion.



The Dow Jones Industrial Average begins continuous daily publication.



The Boston Stock Exchange opens for trading.

OCT 13 1857

18 banks in New York City suspend payments on loans, setting off the Panic of 1857.

Gold from the Ground

Images from the Museum's gold exhibit, opening November 19















NOV 15 1867

The first stock ticker goes "online," making continuous nationwide transmission of stock prices possible for the first time.

NOV 19 1792

In the same room where the Declaration of Independence was adopted 16 years earlier, the Insurance Company of North America holds its IPO at \$10 per share.













- Cuffling bracelets in four gold alloys green, white, yellow and rose — by contemporary jewelry designer Marla Aaron.
- 2. 18-karat gold and jewel encrusted Monopoly set by renowned jewelry artist Sidney Mobell, courtesy of the National Museum of Natural History, Smithsonian Institution.
- **3.** 1940s Tiffany jewelry suite, courtesy of the Tiffany & Co. Archives.
- **4.** Rare US Treasury Department gold license, courtesy of Alan Kaye.
- 5. 14-karat gold Nokia cell phone encrusted with diamonds, rubies and sapphires by Sidney Mobell, courtesy of the National Museum of Natural History, Smithsonian Institution.
- **6.** Decorative gold objects, courtesy of the Rothschild Collection.
- Dentures with gold alloy base and porcelain teeth, courtesy of the National Museum of Dentistry.
- **8.** Gold coin depicting Augustus from a rare "12 Caesars" collection, courtesy of Thomas Tesoriero.
- **9.** "The Independent Gold Hunter on His Way to Klondike," 1895, courtesy of John E. Herzog.
- **10.** Gold boat bar, courtesy of the Rothschild Collection.
- **11.** 1880 gold mining vignette by the American Bank Note Co., courtesy of Mark D. Tomasko.

NOV 30 1999

Exxon and Mobil merge to form ExxonMobil Corp.

DEC 1 1949

The Chicago Stock Exchange, the Minneapolis-St. Paul Stock Exchange, the Cleveland Stock Exchange and the St. Louis Stock Exchange merge to form the Midwest Stock Exchange.

Museum Expands Digital Content Offerings on YouTube Channel and Website

By Chris Meyers, Director of Education

DIGITAL MEDIA HAS BECOME an integral part of public information and education. The Museum's mission is to exhibit artifacts for the public, not to become an artifact itself. Therefore, we are embarking on a new plan to utilize digital media and current social network platforms to extend the reach of the Museum's programs beyond its physical walls on Wall Street. As you may have noticed, we've begun to actively post new videos on our YouTube channel and website. These videos showcase visiting lecturers and prominent authors discussing financial topics relevant to current public discourse. Recent videos include:

- Joseph Stiglitz, Nobel laureate, on the Greek bailout, Trans-Pacific Partnership and US inequality
- Nathaniel Popper, New York Times reporter, on the rise, growth and future of Bitcoin in our modern financial system
- · Bethany McLean, best-selling author, on why mortgage giants Fannie Mae and Freddy Mac are still owned by taxpayers, why several interest groups want to "kill" them and how seven years after they were taken over, their future is still uncertain

These videos provide valuable information the public can use to make informed decisions about how these issues impact

their lives. The video segments each cover a specific topic and are no more than 10 minutes long, making them better suited for today's busy viewers. Playlists are also available for viewers interested in watching the full presentations. In addition, keyword tags enable the videos to be found easily in basic search results. To check them out, Google "MoAF Stiglitz" (for example) or visit the Museum's YouTube channel at www.youtube.com/ FinanceMuseum or website at www.moaf. org/videos. Viewers interested in receiving notification when new videos are posted may subscribe to our YouTube channel, like us on Facebook or follow us on Twitter (@FinanceMuseum). \$

UPCOMING EVENTS

- Nov 3 Walking Tour: History of Wall Street. 11:00 a.m. – 12:30 p.m. \$15 includes admission to the Museum and the Lunch and Learn with Jason Zweig.
- Lunch and Learn Series: Jason Zweig on The Devil's Financial Dictionary. Talk followed by Q&A and book signing. Nov 3 12:30 – 1:30 p.m. \$5 includes Museum admission; members and students free.
- Berkshire Hathaway 50th Anniversary Symposium, in collaboration with NYSSA. 7:30 a.m. 2:30 p.m. This event is sold out. Nov 11
- **Nov 19** Lunch and Learn Series: Artist's talk with Sidney Mobell, world renowned jewelry artist whose work is featured in the Smithsonian Institution and the "Worth Its Weight" exhibit. 12:30 – 1:30 p.m. Free and open to the public.
- **Nov 19** "Worth Its Weight: Gold from the Ground Up" exhibit opening reception. Reservations required. 6:00 – 8:00 p.m.
- Dec 10 Lunch and Learn Series: Joshua Herbstman on "What \$18 Trillion Looks Like." Talk followed by Q&A. 12:30 – 1:30 p.m. \$5 includes Museum admission; members and students free.
- Walking Tour: History of Wall Street. 11:00 a.m. 12:30 p.m. \$15 includes admission to the Museum and the Lunch Dec 15 and Learn with John Sedgwick.
- Dec 15 Lunch and Learn Series: John Sedgwick on War of Two: Alexander Hamilton, Aaron Burr, and the Duel that Stunned the Nation. Talk followed by Q&A and book signing. 12:30 – 1:30 p.m. \$5 includes Museum admission; members and students free.
- Dec 19 Walking Tour: Holidays on Wall Street. 11:00 a.m. – 12:30 p.m. \$15 includes Museum admission.
- Jan 12 2016 Annual Gala. For information, contact Jeanne Baker Driscoll at jdriscoll@moaf.org or 212-908-4694.

All events are held at the Museum (48 Wall Street, NYC) unless otherwise noted. Reservations required. For more information or to register online, visit www.moaf.org/events.



DEC 3

The US national debt is born, as the Continental Congress authorizes Benjamin Franklin and Silas Deane, the American commissioners to France, to obtain a loan of 2 million pounds from the French government.

DEC 16 1835

A fire rages through Lower Manhattan, destroying the New York Stock & Exchange building.

Volunteer Spotlight: Christina Wen

While Many of the Museum's volunteers are retirees or students, a few work their volunteer schedules around full-time jobs. Such is the case with Christina Wen, who began volunteering at the Museum in 2012, five years after co-founding a marketing firm that specializes in consumer electronic goods. Because much of her business is international—primarily in China, Hong Kong and Taiwan—she is able to commit a full day each week to her volunteer activities due to the time difference.

Originally from GuangDong, China, Christina came to the Unites States 11 years ago after having earned a degree in International Business with a minor in Finance from Lancaster University in the United Kingdom.

Her background in finance, along with her well-developed language skills, made Christina a natural fit for the Visitor Services department, where she volunteers



on Thursdays as a docent. She leads public and private group tours of the exhibits in English, as well as in Mandarin and Cantonese, by request.

Christina said her favorite part of volunteering as a docent is when visitors tell her they have learned a lot from her. In turn, she said she also learns quite a bit from them. "I get great satisfaction from that exchange of knowledge," she said.

For example, Christina came to the Museum with a good understanding of business and finance, but with little prior knowledge of US history, having never studied that subject in school. Much of her comprehension of American history — particularly financial history — has come from the Museum's exhibits, as well as other volunteers, staff members and visitors.

When she is not volunteering at the Museum, Christina enjoys watching films and visiting other museums, especially the Metropolitan Museum of Art and the Museum of Art and Design. She has recently begun taking pottery classes and is teaching herself the art of acrylic painting.

It is that combination of a love of art and finance that has made Christina a real treasure at the Museum. \$

MUSEUM OF AMERICAN FINANCE CORPORATE SUPPORT

The Museum gratefully recognizes the support in the past year of the following corporate funders to help advance our commitment to preserving, exhibiting and teaching the power and value of American finance.

- American Express Corporation
- Anonymous
- Bank of America Merrill Lynch
- Barrett Asset Management
- BlackRock, Inc.
- Bloomberg
- Burgundy Asset Management Ltd.
- Capco
- · Carter Ledyard & Milburn LLP
- CFA Institute

- Citigroup
- Clear Harbor Asset Management
- CME Group
- Consolidated Edison
- Credit Suisse Securities LLC
- Crystal & Company
- Guardian Life Insurance
- Herzog & Co., Inc.
- Houlihan Lokey
- ING Americas
- International Precious Metals Institute
- itBit
- Kx Systems
- Moody's
- New York Life
- New York Stock Exchange
- Philidor Rx Services, LLC

- Protiviti
- R. W. Pressprich & Co.
- Richmond Hall
- Saybrook Capital
- Shenkman Capital Management
- Sullivan & Cromwell LLP
- TCW Group, Inc.
- The Adirondack Trust Company
- The Clearing House
- The Royce Funds
- Tishman Speyer
- US Bank
- Van Eck Global
- Vested
- Voya Financial
- Wells Fargo & Company
- Willis

DEC 18 1985 The US House of Representatives approves the Tax Reform Act of 1986. DEC 27 1928 Portfolio manager Walter Morgan founds the nation's first "balanced" mutual fund, the Industrial and Power Securities Co., which invests in both stocks and bonds. Later renamed the Wellington Fund, it eventually forms the nucleus of the Vanguard Group of Investment Cos.

How Hen Fever Led to the Chicken of Tomorrow (Part 2: The Chicken of Tomorrow Contest and the Development of the US Poultry Industry)

By Brian Grinder and Dan Cooper

IT WAS HOWARD C. PIERCE'S IDEA. In 1944, Pierce, the poultry research director for A&P Food Stores, addressed a group of Canadian poultry producers who had expressed great concern that the poultry business would face catastrophic decline when the war ended and beef and pork were no longer rationed. Pierce challenged them to breed a meatier chicken, and his comments at that meeting eventually led to A&P's sponsorship of a long-range program to develop such a chicken, which A&P publicists dubbed "The Chicken of Tomorrow Contest." Historian Margaret E. Derry called this contest "the most important event in the 20th century for the poultry-meat-breeding industry."

The poultry industry had come a long way since Hen Fever raged in the early 19th century. A burgeoning broiler industry, which began in the 1920s, was supplying major metropolitan areas such as New York City with chicken, but for most Americans, chicken was only served on Sundays, holidays or special occasions. Beef and pork were what most Americans thought of as meat; chicken was considered a meat substitute. Meat rationing during World War II increased the consumption of chicken on the home front when, according to nutritional historian Amy Bentley, "...up to 60% of 'US Choice' grade cuts of beef, was reserved for military consumption." A World War II manual entitled How to Stow and Take Care of Food on Shipboard reminded sailors to take especially good care of meat:

Mainstay of many a well-balanced meal, meat is one of the major providers of life-essential complete proteins needed to repair body tissue as it wears out, and to furnish the building blocks for new muscle and sinew in husky, hardy men who follow the sea. But meat is more than that. It is the provider of those savory aromas that awaken the appetite—the part of a meal that makes a man finish feeling well-fed. Meat "sticks to the ribs."



Wax model of an "ideal" chicken from the Chicken of Tomorrow Contest.

Without meat, according to myriads of government pamphlets, the war effort would be placed in serious jeopardy. Civilians were encouraged to eat chicken and organ meats instead of beef and pork. Thus, chicken sales increased during the war, but once the war ended, chicken producers were justifiably concerned that meat-hungry Americans would abandon chicken and embrace the return of beef and pork to the dining room table.

While there were a number of factors that kept chicken from competing effectively with beef and pork, the most important factor was price. In 1950, chicken cost more than hamburger. Furthermore, the average size of a chicken was about three pounds, which was too large for two people to consume but too small for a large family. A larger, less expensive bird along with more choices of cuts and

products was needed before chicken could ever hope to conquer the meat industry. Historian Glenn Bugos wrote that "Doc" Pierce hoped to, in the words of a 1947 Saturday Evening Post article, "squelch that dream of two chickens in every pot by providing one bird chunky enough for the whole family."

That same article noted that the goal of the Chicken of Tomorrow Contest was to provide Americans "a chicken with breast meat so thick you can carve it into steaks, with drumsticks that contain a minimum of bone buried in layers of juicy dark meat, all costing less instead of more." The contest offered a prize of \$5,000 to the entrant that came closest to producing a chicken that most closely resembled a wax model that was considered to be the ideal bird by the contest committee. The contest ran in a three-year cycle with state contests held the first year, regional contests held the second year and a national contest held the third year. The cycle was repeated twice with the first cycle ending with the national contest in 1948 and the second cycle ending in 1951.

The 1948 national contest was held in Georgetown, Delaware, with 40 contestants who were selected based on the state and regional results of the previous two years. Each contestant sent 720 eggs to Delaware, where they were hatched and reared for 12 weeks under identical conditions. At the end of the 12 weeks, the birds were weighed and sent to be slaughtered. 50 carcasses were selected at random from each contestant and judged on the basis of feed conversion, average weight, rate of feathering and uniformity of stock. A similar process was used in the 1951 national contest, which was held in Fayetteville, Arkansas.

The Vantress Poultry Breeding Farm of Live Oak, California won both national contests. The winning birds were Cornish-New Hampshire crosses; a bird with blood lines running back to the Asian birds that were first introduced to the West during the 19th century Hen Fever. Second place in 1948 went to Arbor Acres Farms of Glastonbury, Connecticut and to Nichols Poultry Farm of Kingston, New Hampshire in 1951. Winning the Chicken of Tomorrow Contest catapulted these breeders into the national spotlight, with Arbor Acres capturing a quarter of the female breeding market and Vantress commanding a third of the market. These two companies dominate the market today, and as author Andrew Lawler notes, "The grilled chicken in your sandwich or wrap comes from a descendant of the Vantress bird."

Vantress is now part of Tyson Foods, a company that is largely responsible for making chicken the most popular meat in the United States. After the Chicken of Tomorrow Contest, companies like Tyson worked tirelessly to convert chicken production into a factory process. Chickens became a factory input, and the results were astonishing. Author William Boyd wrote:

By any economic standard, the success of the US broiler industry during the post-World War II period has been remarkable. Between 1950 and 1999 US production increased at an average rate of 7% per year to over 40 billion pounds, while real prices declined by almost a third. Today the average American consumes over 80 pounds of chicken a year, more than beef, pork or any other animal flesh protein.

Chicken became less expensive than beef or pork because of the efficiencies produced by factory farming. According to Boyd, the average market weight of a broiler in 1935 was 2.8 pounds, but in 1995 it was 4.7 pounds. In 1935, it took 112 days for a broiler to reach market weight with a feed conversion ratio of 4.4 pounds of feed per pound of broiler. In 1995, it took only 47 days with a feed conversion ratio of only 1.9.

Marketing and product differentiation also helped sell more chicken. Purdue Farms launched an advertising campaign in 1970 that was able to successfully brand Purdue chickens as a high-quality product that was to be preferred over chicken



Poultry scientists at the Chicken of Tomorrow Contest.

from other poultry producers. Purdue also began selling packages of legs or thighs for lower prices than packages of breasts.

Don Tyson, CEO of Tyson Foods, saw an opportunity for chicken in the fast food industry, which had been built on the hamburger. He relentlessly pursued McDonalds for years, even though he was politely rebuffed. After 14 years, McDonald's finally called Tyson with an offer to produce Chicken McNuggets. Tyson agreed and retrofitted one of his Arkansas plants for the exclusive production of McNuggets for McDonalds. Soon thereafter, Tyson made a deal to produce chicken tenders for Burger King. Chicken's domination of the fast food industry had begun.

Of course, factory farming chickens is not without its problems. The conditions under which chickens are raised are less than ideal. Furthermore, the heavy use of antibiotics as growth enhancers has caused many to question whether eating factory produced chickens is healthy. The genetic manipulation used to make chickens grow faster also makes their meat paler and softer. In his book *The Meat Racket*, Christopher Leonard wrote: "Ultimately, the softer, paler meat didn't hurt the

industry. Above all, the market demanded meat that was produced cheaply, at high volume and on schedule. The taste of the meat was often covered over by breading, frying and flavor additives."

Abuses in farm factory systems have long been chronicled by concerned citizens and animal rights groups. Recently a video made inside a Foster Farm's plant in California captured workers plucking live chickens, as well as punching and throwing live birds. Other videos have captured birds living in cramped cages unable to stand because of their massive size. Major poultry producers have not ignored these concerns.

Tyson Foods now has an Office of Animal Well-Being, whose mission is to commit "to the well-being, proper handling and humane slaughter of all the animals we use to produce meat and poultry." Perdue Farms has a poultry welfare policy that "is guided by the belief that we have a responsibility to ensure that the animals in our care are treated with respect." Others on the retail side of the business, such as McDonalds, Chik-fil-A, Chipotle Mexican Grill and Panera Bread Company, have either already curbed or pledged to curb the use of antibiotics in the poultry they sell.

EDUCATORS' PERSPECTIVE



Awarding the first prize trophy at the Chicken of Tomorrow Contest.

In spite of these actions, many food industry watch dogs remain skeptical. However, there is hope that newer, more humane methods of raising poultry will allow those who do not choose the vegetarian route to consume chicken with a clear conscience. Perhaps a new Chicken of Tomorrow Contest should be held that asks contestants to take these moral and ethical issues into consideration. \$

Brian Grinder is a professor at Eastern Washington University and a member of Financial History's editorial board. Dr. Dan Cooper is the president of Active Learning Technologies.

Sources

Bentley, Amy. *Eating for Victory: Food Rationing and the Politics of Domesticity.* Urbana, IL: University of Illinois Press. 1998.

Boyd, William. "Making Meat: Science, Technology, and American Poultry Production." *Technology and Culture* 42, 631–664. 2001.

Bugos, Glenn E. "Intellectual Property Protection in the American Chicken-Breeding Industry." *The Business History Review* 66, 127–168. 1992.

Derry, Margaret E. *Art and Science in Breeding: Creating Better Chickens*. Toronto: University of Toronto Press. 2012.

Estabrook, Barry. *Pig Tales: An Omnivore's Quest for Sustainable Meat.* New York: W.W. Norton & Company. 2015.

Horowitz, Roger. "Making the Chicken of Tomorrow: Reworking Poultry as Commodities and Creatures, 1945–1990," in Susan R. Schrepfer and Philip Scranton, eds.: *Industrializing Organisms: Intro*ducing Evolutionary History. New York: Routeledge. 2004.

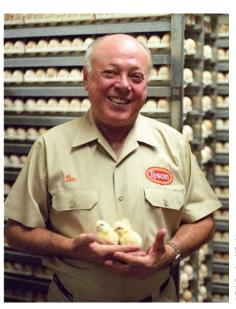
How to Stow and Take Care of Food on Shipboard: Official Manual. Washington, DC: War Shipping Administration, Food Control Division. 1945.

Jacobs, Meg. "'How About Some Meat?' The Office of Price Administration, Consumption Politics, and State Building from the Bottom Up, 1941–1946." *The Journal of American History* 84, 910–941. 1997.

Kesmodel, David, Jacob Bunge and Annie Gasparro. "McDonald's to Curb Antibiotics in Chicken." Wall Street Journal (Online). 2015.

Lawler, Andrew. Why Did the Chicken Cross the World?: The Epic Saga of the Bird that Powers Civilization. New York: Atria Books. 2014.

Leonard, Christopher. *The Meat Racket: The Secret Takeover of America's Food Business.*New York: Simon & Schuster. 2014.



Don Tyson, CEO of Tyson Foods, spent 14 years convincing McDonald's to hire Tyson to produce its Chicken McNuggets. He later made a deal with Burger King as well, beginning chicken's domination of the fast food industry.

Levinson, Marc. *The Great A&P and the Struggle for Small Business in America*. New York: Hill and Wang. 2012.

Nicholson, Arnold. "More White Meat for You." Saturday Evening Post 220, 12–12. 1947.

Perdue Corporate Responsibility: Poultry Welfare.
2015. Available at http://www.perduefarms
.com/Corporate_Responsibility/Our_
Aspirations/Consumers/Poultry_Welfare/

Regan, Helen. "Foster Farms Suspends Five Employees After Graphic Video Uncovers Animal Abuse." *Time.com.* 2015.

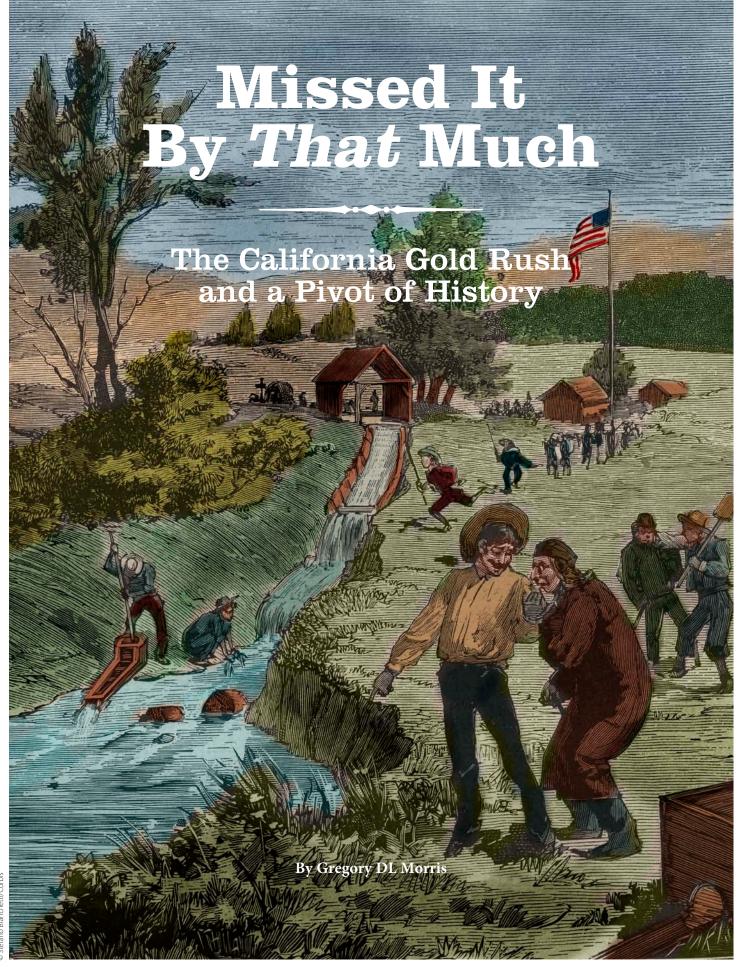
Shrader, H.L. "The Chicken-of-Tomorrow Program; Its Influence on 'Meat-Type' Poultry Production." *Poultry Science* 31, 3–10. 1952.

Squier, Susan M. Poultry Science, Chicken Culture: A Partial Alphabet. New Brunswick, NJ: Rutgers University Press. 2011.

Striffler, Steve. *Chicken: The Dangerous Transformation of America's Favorite Food.* New Haven, CT: Yale University Press. 2008.

Tomhave, A.E., H.L. Shrader and Karl C. Seeger. *The Results of the Chicken-of-Tomor-row 1948 National Contest.* Newark, DE: University of Delaware. 1948.

Tyson Foods Animal Well-Being. 2015. Available at http://www.tysonfoods.com/Ways-We-Care/Animal-Well-Being.aspx



Engraving of Sutter's Mill, site of the discovery of gold in California, circa 1850s.

Spanish-speaking people sought gold in North America for 358 years. They missed it by nine days.

The first major gold discovery in North America was January 24, 1848, when gold flakes were found in a mill race in a settlement outside what is now Sacramento, California. At the time it was technically *Alta California*, a province of Mexico. But in name only, and not for very much longer.

Mexico was at war with the United States, and on July 7, 1847, a small detachment of US Navy officers and sailors had captured the presidio at Monterey, the provincial capital, without firing a shot; the small garrison had already decamped to Los Angeles.

Nine days after the gold discovery, on February 2, 1848, the government of Mexico signed the Treaty of Guadalupe Hidalgo, ending the Mexican War and ceding California, along with what is today Arizona, New Mexico, Texas and parts of other states, to the United States.

Given the one-sided nature of the war,

it would be difficult to argue that if Mexican authorities had known about the gold in California earlier, the outcome of the conflict would have been different. If the discovery had been made many years earlier, perhaps that wealth could have changed the economic and political situation in Mexico.

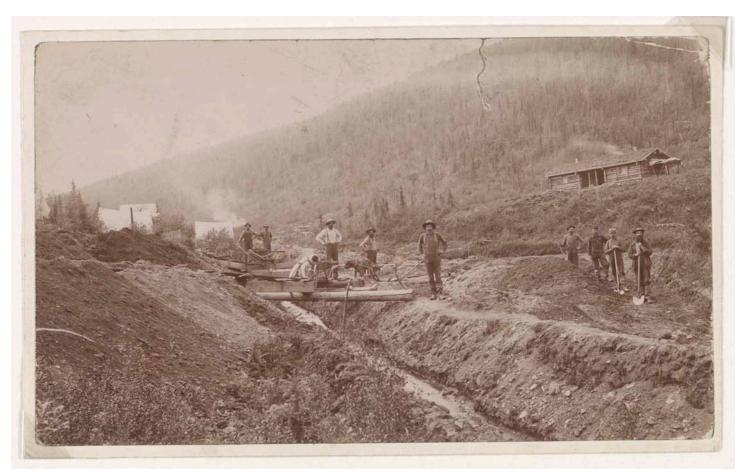
Perhaps a larger population, or at least a substantial garrison, would have been in place, and the capture of California might have been a battle or even campaign, rather than a matter of wading ashore from a whaleboat and running up the Stars and Stripes. The course, but not likely the outcome, of the war could have been different.

In contrast, there is no doubt about the effects of the California gold discovery on the adolescent United States. Word only took a few months to filter back East, and the 49ers stampeded their way into history. The population of California boomed, and it applied for statehood that same year. Its state constitution prohibited

slavery, and its admission precipitated the Compromise of 1850, one of the series of fragile measures that slowed, but did not stop, the slide into civil war.

The vast wealth, estimated at 750,000 pounds of gold by the time the fields were played out in the late 1850s, boosted the US economy and gave the federal government some financial footing on the eve of war. After the war, the need to connect California to the rest of the nation spurred Abraham Lincoln's dream of a transcontinental railroad, completed in 1869.

Meanwhile Mexico, shorn of its northern third, endured cycles of revolution, dictatorship and reform. In a statement of great accuracy and great melancholy, José de la Cruz Porfirio Díaz Mori, who served seven terms as president of Mexico (between 1876 and 1911) said, "Pobre México! ¡Tan lejos de Dios y tan cerca de los Estados Unidos!" [Poor Mexico! So far from God and so close to the United States!] Born in the poor southern state of Oaxaca, he is buried in Montparnasse Cemetery in Paris.



Gold miners in El Dorado, CA, circa 1849-53.

The site commonly known as Sutter's Mill is formally Marshall Gold Discovery State Historic Park. According to the official park history, James W. Marshall discovered gold on the South Fork of the American River in the valley the Nisenan Indians knew as Cullumah. "This event led to the greatest mass movement of people in the Western Hemisphere and was the spark that ignited the spectacular growth of the West during the ensuing decades." The tailrace of Sutter's sawmill is still visible.

Marshall was building the mill for John Sutter, a Swiss who had permission from Mexican authorities to build a settlement and trading post, *Nuevo Helvetia*. Despite efforts by Marshall and Sutter to keep the secret, the largest gold rush in US history was on by early 1849.

Park research estimates that at the time of Marshall's discovery, the state's non-Indian population was about 14,000. By the end of 1849, it had risen to nearly 100,000, and it continued to grow to some 250,000 by 1852. It reached 380,000 by the eve of the Civil War.

Today, a few mines and the remains of several boom towns have been preserved in a variety of state parks. Most of them, including the Marshall Gold Discovery site, the Empire Mine, the historic town of Columbia, the rich gold deposits at Plumas Eureka and the controversial hydraulic mining pits at Malakoff Diggings, are in or near the Mother Lode region of the central Sierra Nevada foothills.

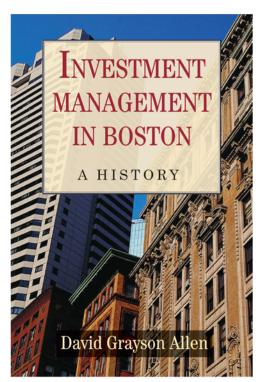
According to the US Archives' summary of the treaty of Guadalupe Hidalgo, Mexico ceded to the United States *Alta California* and *Nuevo Mexico*. That was known as the Mexican Cession and included present-day Arizona and New Mexico and parts of Utah, Nevada and Colorado (Article V). Mexico relinquished all claims to Texas and recognized the Rio Grande as the southern boundary with the United States (also Article V).

The United States paid Mexico \$15 million "in consideration of the extension acquired by the boundaries of the United States" (Article XII) and agreed to pay American citizens debts owed to them by

the Mexican government (Article XV). Other provisions included protection of property and civil rights of Mexican nationals living within the new boundaries of the United States (Articles VIII and IX), the promise of the United States to police its boundaries (Article XI) and compulsory arbitration of future disputes between the two countries (Article XXI).

Given the current heated debate over immigrants living and working in the United States, it is worth noting that the US government is treaty bound to protect the property and civil rights of Mexican nationals. \$

Gregory DL Morris is an independent business journalist, principal of Enterprise & Industry Historic Research (www.enterpriseandindustry.com) and an active member of the Museum's editorial board.



\$29.95 paper, 448 pages, 15 illus. ISBN 978-1-62534-103-7

massachusetts

Investment Management in Boston

A History

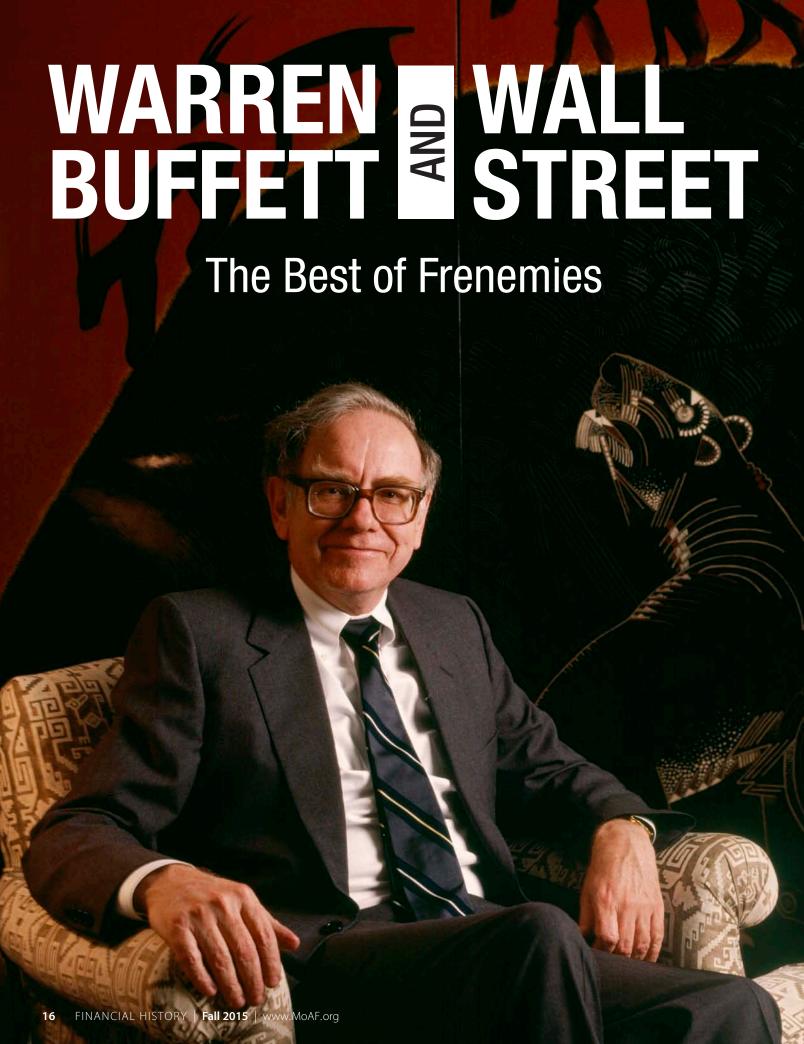
DAVID GRAYSON ALLEN

Presented here for the first time, the long history of financial management in one of America's oldest cities.

"'Encyclopedic' best describes this remarkable account of investing over the course of Boston's long history. . . . Well written and engaging throughout, with endnotes full of additional details and resources. Highly recommended."—Choice

"Investment Management in Boston is a fresh—and original—treatment of the multitude of activities by individuals and business firms in the Boston region over the last century. A highly valuable study."—Edwin Perkins, author of Wall Street to Main Street: Charles Merrill and Middle-Class Investors





O Louis Psihovos/COBBI

Lawrence A. Cunningham

IN 1965, when 35-year-old Nebraskan Warren Buffett took control of Berkshire Hathaway, Inc., a dying New England textile company, the local press portrayed him as a Wall Street takeover artist: a liquidator of the sort that inspired Danny DeVito's fiendish character in "Other People's Money." True, Buffett acquired Berkshire on the cheap—for a fraction of its \$22 million book value of \$19.24 per share—and eventually shuttered the mills. But he has always campaigned vigorously against hostile bids, heavy borrowing, asset flipping and other controversial Wall Street practices.

Buffett became a vocal critic of Wall Street, as he favored cash to debt, held companies for the long term and defended trustworthy managers against short-term pressures. His oratory sounded more like the high-minded defender of the corporate bastion in "Other People's Money," played by Gregory Peck, than an apostle of greed. Speaking as the reluctant interim chairman of Salomon after its 1991 bond trading scandal, for instance, Buffett famously broadcast to Congress a new credo given to his Wall Street bankers: "Lose money for the firm, even a lot of money, and I will be understanding; lose reputation for the firm, even a shred of reputation, and I will be ruthless."

In addition to steady criticism, however, Buffett has also been a vital friend to Wall Street. His stint as Salomon chairman followed from Berkshire's "white squire" stake in the investment bank, designed to deter a hostile takeover bid. The year was 1987, when Salomon's largest shareholder grew frustrated with management and flirted with selling a 12% block to Ron Perelman, the corporate raider who had recently seized control of Revlon. Fearful of being next, Salomon CEO John Gutfreund turned to Buffett, who pledged fidelity while buying a sizable issue of convertible preferred stock yielding 9%.

Buffett's cultivation of a reputation for offering hands-off long-term capital dates back to 1973 when Berkshire accumulated a stake in The Washington Post Co. Buffett vowed loyalty to CEO Kay Graham, who soon asked him to join the board. In 1986, Buffett went further when Berkshire took a large position in Capital Cities/ ABC, giving its managers, Dan Burke and Tom Murphy, proxy power to vote Berkshire's shares as they saw fit. During that era of hostile takeovers, Berkshire and Buffett likewise backed managers against raiders at companies such as Champion and Gillette, and defeated Ivan Boesky's run at Scott Fetzer, paying \$315 million to acquire the conglomerate, which Berkshire still owns to this day.

Wall Street values Buffett's reputation along with Berkshire's balance sheet. In the 25 days after the 2008 collapse of Lehman Brothers, Berkshire invested \$15.6 billion in numerous companies, when most of corporate America was starved for credit. For one, Berkshire staked \$5 billion for preferred stock in Goldman Sachs, paying a 10% dividend and redeemable for a 10% premium. Berkshire also got an option to buy a similar amount of Goldman common stock at \$115 per share, below the market price of \$125, making it "in the money."

In 2011, after the crisis passed, Goldman redeemed the preferred. So Berkshire earned a few years of dividends plus the buyback premium, adding to \$1.8 billion. In early 2013, Berkshire exercised its option to buy Goldman common. Rather than pay the \$5 billion cash price (then worth \$6.4 billion), Berkshire took stock valued at the difference of \$1.4 billion. Berkshire's total gain on its \$5 billion investment was \$3.2 billion, 64% in a few years—along with 3% of Goldman's common stock it still owns.

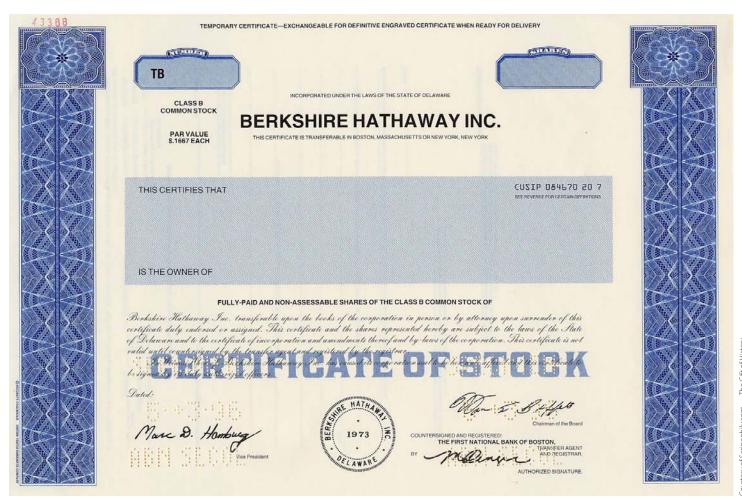
Meanwhile, Bank of America continued to struggle to the point where, in 2011, it likewise turned to Berkshire for a \$5 billion investment. Berkshire received preferred stock paying a 6% dividend and redeemable for a 5% premium. In addition, Berkshire obtained warrants to purchase 700 million shares of the bank's common stock at a per share exercise

price of \$7.14, or just under \$5 billion. Such a stake is worth more than twice that today (\$11.2 billion at the stock's recent price of \$16) and would represent a greater than 6% interest in the bank. If Berkshire exercises the warrants in 2021, on the eve of expiration, it will add to an investment portfolio already boasting such big stakes in venerable institutions of finance, including American Express, Moody's Investor Service and Wells Fargo.

Berkshire and Buffett have always been bullish on corporate America, yet they behave quite differently from most managers and their Wall Street advisers alike. For instance, unlike most American corporations and their financiers, Berkshire shuns debt as costly and constraining. Since 1967, the preferred form of leverage has arisen from internal insurance operations. Customers pay premiums up front in exchange for claims to be paid later, if at all, and insurers get to invest the proceeds, called float, in the interim. Float offers more attractive leverage than debt since there are no coupons, due dates, covenants - or Wall Street bankers and fees. Berkshire now owns marquee companies in the insurance field, including National Indemnity, GEICO and Gen Re, and commands float exceeding \$85 billion.

In typical takeovers, whether by strategic buyers across corporate America or financial buyers from Wall Street, acquirers always intervene, invariably change strategy and frequently replace management. Berkshire's opposite tack makes it an attractive alternative for sellers of businesses seeking autonomy. They also relish Berkshire's sense of permanence, particularly compared to Berkshire's rivals from Wall Street's private equity funds. In private equity's leveraged buyouts, businesses face not only leverage and intervention, but the funds charge high fees and make quick exits, meaning rapid change followed by a sale. Berkshire, in contrast, imposes no fees and has not sold a subsidiary in 40 years.

While Wall Street sponsored hostile bidders and junk-bond buyouts to break up vast conglomerates, Buffett was not only defending corporate managers but



Rare specimen Class B stock certificate from Berkshire Hathaway Inc., printed in 1996.

building Berkshire into one of the largest conglomerates in history. Today, in addition to an investment portfolio of two dozen stocks worth more than \$100 billion, Berkshire is comprised of 65 different wholly-owned subsidiaries, nine of which would be *Fortune* 500 companies standing alone. The conglomerate is worth more than \$500 billion with a per share book value exceeding \$100,000 — marking a 20% compound annual growth rate from Buffett's assumption of control.

Berkshire's Clayton Homes subsidiary is the nation's largest builder and financier of manufactured housing, most sold to lower income Americans. On Wall Street, Clayton repackages substantial portions of its loans into mortgage-backed securities. In 2008, investors in other securitized mortgage loans faced steep defaults, due to lax lending practices of originators along with poor quality control during the securitization process. But Clayton's securitized loans fully performed, repaying all

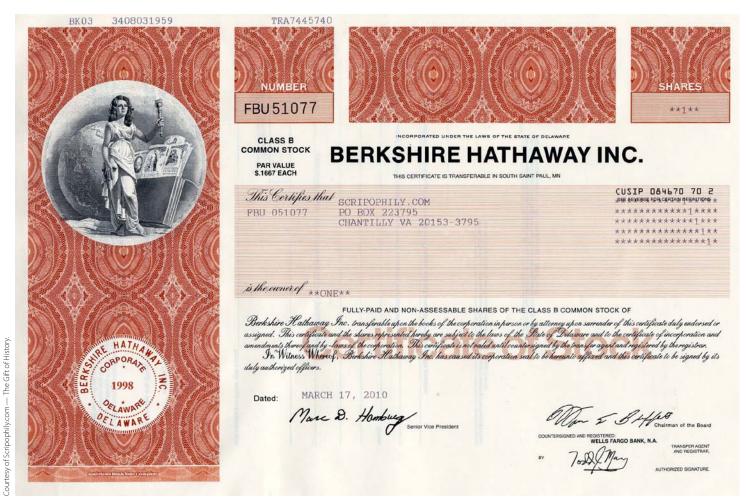
principal and interest. It is not because of customer credit quality, which is weak, but because despite low credit scores, Clayton only lends to borrowers on terms they likely can repay — based on an examination of assets and income and without escalating "teaser" interest rates.

Berkshire's unique practices do not always succeed. Take its aversion to middlemen in the acquisitions arena. Berkshire does not scout for deals but rather "waits for the phone to ring," as Buffett puts it. Buffett evaluates opportunities alone or with advice only from Vice Chairman Charlie Munger, foregoing the professionals that most companies hire to conduct due diligence. While the practice has generally yielded strong results, costly mistakes have occurred, ranging from the total loss of \$443 million paid in 1993 using Berkshire stock for a disintegrating shoe maker to a \$1 billion after-tax loss on debt Berkshire staked in 2007 on a failed leveraged buyout of Texas utility companies.

Berkshire's \$22 billion 1999 acquisition of Gen Re, also paid in Berkshire stock, dramatized the pitfalls: unbeknownst to Buffett when Berkshire bought Gen Re, its underwriting standards had deteriorated, its derivatives book had become bloated and its exposure to catastrophic risks was unduly concentrated. Without Berkshire, Gen Re's losses covering the 9/11 terrorist attacks on New York's Financial District would likely have rendered it insolvent.

Consider Buffett's trust-based philosophy of granting managers unbridled autonomy. While lauded within the company and responsible for much of Berkshire's success at the subsidiary level, costly management shifts sometimes result. Costs are revealed in several well-publicized CEO departures, including multiple successive resignations within several years at each of Benjamin Moore, Gen Re and NetJets.

The most dramatic departure occurred in 2011 when David Sokol, widely seen as a likely successor to Buffett, was caught



Berkshire Hathaway Inc. stock certificate, dated March 17, 2010.

front-running: a form of insider trading in which he bought shares in a publicly traded stock, Lubrizol, ahead of pitching the company as a Berkshire acquisition candidate. While the scandal prompted questions about Berkshire's lack of formal vetting and grooming of top executives, Buffett's response also raised eyebrows. After Buffett learned of Sokol's front running, he drafted a press release himself. The release, which spoke of Sokol's "extraordinary" contributions to Berkshire and expressed Buffett's opinion that Sokol had done nothing illegal, drew sharp criticism, given Buffett's traditional high standard of rectitude.

The approach reflected Buffett's antipathy to corporate bureaucracy, which similarly translates into substantial net savings, but with costs. For instance, Berkshire has no centralized departments such as communications, human resources or legal. Yet such frugality can leave subsidiaries flatfooted in response to the inevitable investigative

journalism targeting them. One such exposé attacked Berkshire's practice of generating substantial funds from float, suggesting it gives personnel at National Indemnity perverse incentives to avoid or delay paying legitimate claims—even in bad faith.

Another piece challenged Clayton Homes, arguing that its employees pressure customers into unaffordable financing arrangements and follow up with aggressive collection practices. After publication, both subsidiaries and Berkshire corrected errors in the stories, but the damage had been done. A full-time professional who makes engagement with journalists a top priority would likely have altered the shape of the original reports, a better outcome than the thrust and parry that now defines the public record. Berkshire acts as if it is small, but it is a Goliath to reporters and readers alike.

Buffett is critical of Wall Street and other financial intermediaries primarily for unnecessary complexity and corresponding costs. His core message for Wall Street remains valuable: simplicity. Parsimony and frugality underpin the Berkshire model which, while imperfect, has delivered substantial net gains, thanks to these hallmarks: investment in reputation; commitment to trust, loyalty and autonomy; avoiding hostile or leveraged acquisitions; self-reliance in corporate administration; and permanent ownership of subsidiaries.

Fifty years after Buffett took control of Berkshire, the 85-year-old Omaha denizen still has much to offer Wall Street, in capital and wisdom alike. He is certainly more Peck than DeVito. \$

Lawrence A. Cunningham, a professor at George Washington University, is the co-author and publisher of The Essays of Warren Buffett: Lessons for Corporate America and author of Berkshire Beyond Buffett: The Enduring Value of Values.



William Jennings Bryan and the

"Cross of Gold" Speech

By Ron Hunka

ON JULY 9, 1896, at the Democratic National Convention in Chicago, William Jennings Bryan, a former two-term congressman from Nebraska and recently-defeated senate candidate, rose to deliver an oration to address the great monetary crisis dividing the nation. Bryan's "Cross of Gold" speech would prove to be one of the most memorable addresses in American political history.

In the last quarter of the 19th century, there were two major schools of thought about American monetary policy, each bitterly opposed to the other. Advocates of one were known as "silverites," who favored a currency redeemable in silver or gold, a position called "bimetallism." Silverites championed "free silver," that is the free, unlimited coinage of silver. In addition, they advocated the circulation of "cheap" or devalued money. In this way, they hoped to be able to pay off their debts. (Silver had been used as money, along with gold, prior to its demonetization in the Mint Act of 1873. The Act was derisively known among free silver advocates as the "Crime of 1873.")

Advocates of the second school were designated "goldbugs." To ensure the dollar's stability, they believed that a sound currency must be based on gold and that silver should be demonetized. (A Republican Congress had essentially put the

nation on a gold standard in the 1873 Act. This meant that the value of the nation's monetary unit, the dollar, was fixed to a defined measure of gold.)

Adherents of the silverite position were mainly members of the Democratic party, the Populists—a political party that existed from 1891 to 1908, and other smaller parties. They were mainly farmers and laborers. The goldbugs were principally Republicans, who were predominantly bankers and businessmen. However, President Grover Cleveland, a Democrat, along with a significant block of his party, supported the monetary policies of the goldbugs. Such persons were often called "Bourbon Democrats," a name sometimes mistakenly attributed to their drinking proclivities.

The Sherman Silver Purchase Act of 1890

As a concession to the grievances of the farmers, laborers and miners, Congress passed the Sherman Silver Purchase Act of 1890. It did not authorize the free and unlimited coinage of silver, but it did increase the monthly amount of silver that the government was required to purchase to 4.5 million ounces. The aim of the bill was to allow farmers to pay off large debts with cheaper dollars. The silver was paid for with special issue Treasury notes, which could be redeemed for either silver or gold. However, when investors began to preferentially redeem the notes for gold, it resulted in a depletion of federal gold reserves.

In 1893, to address the gold reserves

problem, President Cleveland called a special session of the 53rd Congress to repeal the Silver Purchase Act. Of course, the silverites opposed the action, and Congressman William Jennings Bryan spoke against the bill. On August 16, to a full membership of the House and an overflowing visitors gallery, Bryan articulated what he considered to be the potentially "dire consequences of a single gold standard." It would, he said, shrink the global supply of money when the world population was growing and make the price of gold rise so that the "debt of the debtor" would increase. Quoting from Dante Alighieri's The Divine Comedy, Bryan opined, it would lead to a "realm over whose door is written: 'Abandon hope, all ve who enter here!"

Overall, Bryan displayed an adroit command of the literature of currency and eloquently made his case that a monetary system based on both gold and silver would best bring about a stable economy. In the end, however, Bryan's efforts failed, as Cleveland succeeded in repealing the Act.

The Paid Lecturer

When Congress formally adjourned in March 1895, Bryan, the two-term congressman who was now unemployed, made it known that he was available to speak on topics such as "lower tariffs, prohibition, the graduated income tax and the free coinage of silver."

After a failed attempt at election as senator from Nebraska, at a time when senators were still elected by state legislatures,

William Jennings Bryan's "Cross of Gold" speech from the 1896 Democratic National Convention.

Bryan settled on a career in journalism and lecturing. In the former, he wrote editorials for the *Omaha World-Herald*. In the latter, working through several speakers bureaus, he became a paid lecturer. Earning anywhere from \$50 to the remarkable sum, for that time, of \$200 per speech, Bryan made major speeches four or five times a week. Not uncommonly, though, he also delivered speeches *probono* for those who could not pay.

It was the Worst of Times

The Panic of 1893 brought about the worst financial crisis in US history up to that time. Among other precipitating factors, the Panic resulted when a major eastern railroad, the Reading, went into receivership due to over expansion and a resulting inability to repay loans. This turn of events caused the bankruptcy of about a quarter of the nation's railroads, the collapse of 600 banks and the closure of 16,000 businesses. Subsequently, the stock market plunged, and an agricultural depression in the South and West worsened.

Over the next few years, unemployment rose to four million. Despite the seriousness of the situation, believing with many politicians of the time that such events were a normal part of the self-correcting business cycle, President Cleveland took little action. However, he did choose to shore up the gold reserves—which had dropped below the psychological barrier of \$100 million—via discounted bond sales to J.P. Morgan and American representatives of the Rothchilds. Both made huge profits.

As Clear as a Cathedral Bell

The Panic set the stage for the 1896 presidential election and Bryan's speech at the Democratic convention. According to historian Michael Kazin, once in office new presidents of that period usually did not entertain the notion of radical changes in national policy, but rather leaned toward conservative policies. Bryan, however, was different and envisioned a radical transformation of a political order increasingly controlled by the power of great financial and manufacturing corporations. A devout Presbyterian, Bryan saw himself as the emerging leader of a great moral crusade, which would bring about "a regime of Christian decency" and an accompanying focus on the interests of farmers and working people.



1904 *Puck* cartoon featuring William Jennings Bryan walking along railroad tracks, following a sign "To Salt River" (on the 1896 free silver dime). He is carrying a gold cross, crown of thorns, bellows and megaphone. He is followed by Arthur Brisbane, James K. Jones, Charles A. Towne, Richard F. Pettigrew and Gardner F. Williams.

Leading up to the presidential election of 1896, Bryan, through his numerous speaking engagements, had kept his name before the public and built a reputation as a champion of the little man. So much so that eventually he acquired the appellation, "the Great Commoner."

Bryan's nonpareil oratorical skills had not come to him by chance. They were the result of a lifetime of practice. As a boy, his mother had him perform dramatic presentations from the McGuffey Readers. Later, he studied with elocution teachers and participated in college debating opportunities. In this way, Bryan perfected his speaking skills. In his *Memoirs*, he wrote that, as a young man, he had "felt the lure" of public speaking and entered every speaking contest available. Observers characterized his speaking skills as "brilliant" and sometimes "breathtaking."

Leading up to the 1896 presidential campaign, Bryan had become recognized by many as the finest orator of his day. Even those who disagreed with him acknowledged the magnificent quality of his voice. Before the invention of the audio amplifier in 1909, the strength of a speaker's voice was one of his most essential tools of his trade. In fact, Bryan's wife told a story of how, in Corpus Christi, Texas in 1898, she had once overheard clearly a conversation he was having with a man three blocks down the street from where they were staying.

Since recording devices did not exist at the time of the 1896 Democratic convention, only written recollections and impressions of Bryan's voice remain. One observer, for example, characterized his voice as "deep and powerfully musical," a second as "free, bold, picturesque," and a third as "clear as a cathedral bell." In the eventual presidential campaign in which Bryan reputedly gave "3,000 formal speeches," his powerful voice sustained him.

The Democratic Convention of 1896

By the spring of 1896, the nation's economy gave little reason for optimism, and in the six months prior to the convention the silver issue dramatically gained strength. By the convention's opening in July, in the minds of most Democrats, the silver issue "became a metaphor for reform and a cureall for what ailed America." By this time, a majority of the convention delegates supported some configuration of bimetalism.

With a seating capacity of 20,000 and a floor space of five-and-a-half acres, the Chicago Coliseum was arguably the largest permanent exhibition building in the world. To date, it had managed to accommodate events as large and rambunctious as Buffalo Bill's Wild West Show.

Given the vastness of the physical facility, the Coliseum was a worthy challenge for the lung capacity of the best orators of the day. (In fact, Senator Vilas of Wisconsin had to quit the rostrum when his



1896 Democratic party nominees William Jennings Bryan for president and Arthur Sewall for vice president.

voice failed.) To compete with the din of a huge audience, speakers had to resort to orator's tricks of the day, such as spreading and raising their arms to expand their lungs and diaphragms to crank up the volume of their voices and moving around the stage to reach different parts of the audience. Even so, beyond the front rows, it could be difficult for some of the audience to make out the finer points of a speaker's address. But Bryan, with his powerful voice, was the master of all the acoustical obstacles of the great coliseum.

In 1896, Grover Cleveland was completing his second presidential term. Though he was not a candidate, he did what he could to support his Bourbon-goldbug faction at the convention. So he dispatched the former navy secretary, William Whitney, with a private, three-car train loaded with gourmet food and wine to lift their spirits. But the gesture mainly illustrated the pecuniary disparity between silverites and Bourbons. (In contrast, with an affinity for frugality, Bryan was to muse after the convention, when checking out of his hotel, that he had only incurred \$100 in expenses to win the Democratic nomination.) So bitter was the infighting on every vote in the convention—almost all of which the Bourbons lost-that a goldbug Democrat commented that he was reminded of "the French Revolution."

On the third day of the convention, when the Bourbons insisted on debating the primary issues of the platform on the

floor, each side selected speakers to present its views. The silverites, holding sway, took the first and last speaker positions, and three gold bugs filled the remaining slots.

Viewing the last position as the strongest, Bryan persuaded co-silverite Ben Tillman of South Carolina to take the longer, opening debate position. As it turned out, after a disastrous speech from the former secessionist, Tillman, and an overall two hours of rambling, half-heard speeches, the disappointed audience, which had expected more, became restless. Some began to call out for Bryan. His moment had arrived.

William Jennings Bryan, only 36 years old, quickly navigated the stairs leading up to the 20-foot-high rostrum of the Coliseum. After words of deference to the speakers before him, he began, "I come to speak to you in defense of a cause as holy as the cause of liberty - the cause of humanity." Bryan and his followers earnestly believed that this was a fight for the fate of democracy itself. After about 20 minutes of countering the goldbug positions, Bryan drew to his conclusion. Raising his hands to his head, he put his fingers out along his forehead and said, of the goldbugs, "we will answer their demand for a gold standard by saying to them: You shall not press down upon the brow of labor this crown of thorns, you shall not crucify mankind upon a cross of gold."

Stepping back, away from the podium, Bryan extended his arms straight out from

the sides of his body and held them there for a long moment in a pose that in a flash evoked the crucifixion. The crowd was stunned into silence, and the speaker left the rostrum and walked toward the Nebraska delegation. Then the Coliseum crowd detonated into a raucous celebration about twice as long as the speech itself. Both men and women stood on their chairs and threw their hats in the air, oblivious to where they came down. Two elderly southern delegates embraced one another and wept profusely. A band struck up "For He's a Jolly Good Fellow," and the silverites hoisted Bryan on their shoulders and marched around the Coliseum to the music. Such processions were copied at presidential conventions for years to come.

Contrary to popular belief, Bryan's speech was not impromptu. He had planned it, practiced it and refined it for months, down to the memorable gestures, long before the convention. He had even used the analogies about the crown of thorns and cross of gold in earlier speeches. But the communications of those days being what they were, these figures of speech would not have been familiar to his audience.

In the fourth round of delegate voting that followed Bryan's speech, he went on to win his party's nomination. In Bryan's victory, the "poet-reporter" Edgar Lee Masters—author of the classic *Spoon River Anthology*—saw "the beginning of a changed America." Not since Andrew Jackson, he pointed out, had a major political party sided with the poor.

The Election Outcome and the Firmament of the Gold Standard

In the presidential election of 1896, Bryan received 6.5 million votes, more than any previous presidential candidate. But progold William McKinley rang up 7.1 million votes. McKinley won 23 states and 271 electoral votes, while Bryan won 22 states and 171 electoral votes.

In the last year of his first term, on March 14, 1900, President McKinley signed into law the Gold Standard Act, formally putting the United States on the gold standard on which it had informally been since 1873. The Act made gold the only metal for which paper money could be redeemed and charged the Secretary of the Treasury with ">> continued on page 39



DIGITAL GOLD



Reinventing Money in the 21st Century

By Nathaniel Popper

The virtual currency Bitcoin is often viewed as a bolt out of the blue—an idea that came fully formed from the mind of its mysterious creator, Satoshi Nakamoto, who first released the idea in 2008. Nathaniel Popper's book, Digital Gold: Bitcoin and the Inside Story of the Misfits and Millionaires Trying to Reinvent Money, uncovers the true history of Bitcoin, including the many years of experimentation that made the technology possible. Much of the most important work began in the 1990s in an early online community known as the Cypherpunks. The Cypherpunks were concerned about maintaining personal privacy in a digital world. One of the main goals of the Cypherpunks was to create a new kind of digital cash that would not leave a trail of personal details like a traditional credit card statement. These ambitions to create a new digital money led to many experiments that failed at the time but were later harnessed for Bitcoin. This excerpt from Digital Gold provides some historical perspective for these Cypherpunk experiments.

THE NOTION OF CREATING a new kind of money would seem, to many, a rather odd and even pointless endeavor. To most modern people, money is always and everywhere bills and coins issued by countries. The right to mint money is one of the defining powers of a nation, even one as small as the Vatican City or Micronesia.

But that is actually a relatively recent state of affairs. Until the Civil War, a majority of the money in circulation in the United States was issued by private banks, creating a crazy patchwork of competing bills that could become worth nothing if the issuing bank went down. Many countries at that time relied on circulating coins from other countries.

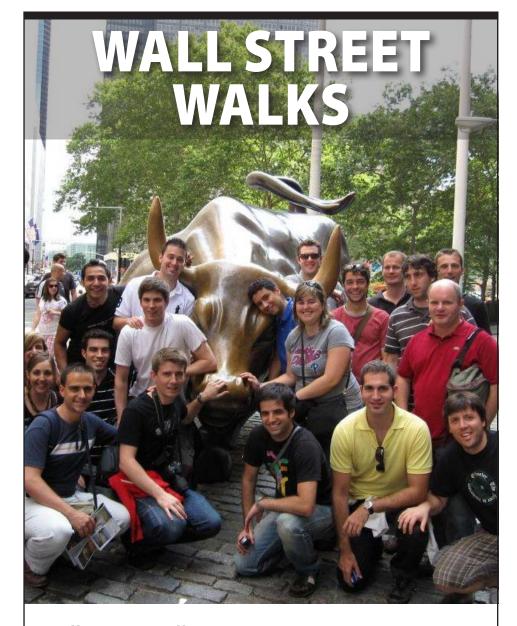
This was the continuation of a much longer state of affairs in which humans engaged in a seemingly ceaseless effort to find better forms of money, trying out gold, shells, stone disks and mulberry bark along the way.

The search for a better form of money has always been about finding a more trustworthy and uniform way of valuing the things around us—a single metric that allows a reliable comparison between the value of a block of wood, an hour of carpentry work and a painting of a forest. As sociologist Nigel Dodd put it, good money is "able to convert qualitative differences between things into quantitative differences that enable them to be exchanged."

In the 1990s, an online community, known as the Cypherpunks, began working on several free-wheeling experiments to create a new kind of money for the digital age. The money imagined by the Cypherpunks looked to take the standardizing character of money to its logical extreme, allowing for a universal money that could be spent anywhere, unlike the constrained national currencies we currently carry around and exchange at each border. As privacy activists, the Cypherpunks also wanted money that would be harder for governments to track than transactions in the existing financial system.

In their efforts to design a new currency, the Cypherpunks were mindful of the characteristics usually found in successful coinage. Good money has generally been durable (imagine a dollar bill printed on tissue paper), portable (imagine a quarter that weighed 20 pounds), divisible (imagine if we had only \$100 bills and no coins), uniform (imagine if all dollar bills looked different) and scarce (imagine bills that could be copied by anyone).

But beyond all these qualities, money always required something much less tangible, and that was the faith of the people using it. If a farmer is going to accept a dollar bill for his hard-earned crops, he has to believe that the dollar, even if it is only a green piece of paper, will be worth something in the future. The essential quality of successful money, through time, was not who issued it—or even how



Wall Street Walks takes visitors through the historic capital of world finance—the one-square-mile of downtown Manhattan known as "Wall Street." Our visitors learn about people, places and events comprising over 200 years of history, as they walk among locations where it all happened.

- Regular public tours daily, except Sunday.
- Group and private tours available.

Proud walking tour partner of the Museum of American Finance.

CONTACT:

www.WallSreetWalks.com tours@wallstreetwalks.com 212-666-0175 (office) 212-209-3370 (ticket hotline) portable or durable it was — but rather the number of people willing to use it.

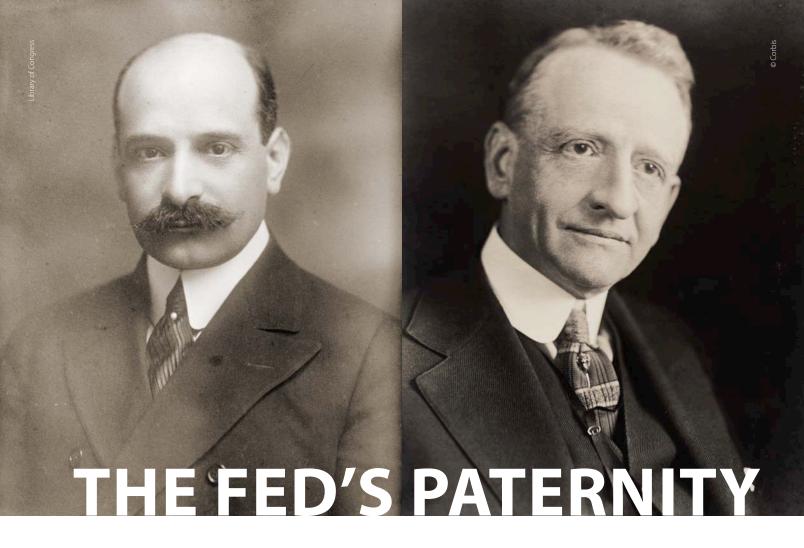
In the 20th century, the dollar served as the global currency in no small part because most people in the world believed that the United States and its financial system had a better chance of surviving than almost anything else. That explains why people sold their local currency to keep their savings in dollars.

Money's relationship to faith has long turned the individuals who are able to create and protect money into quasi-religious figures. The word "money" comes from the Roman god Juno Moneta, in whose temple coins were minted. In the United States, the governors of the central bank, the Federal Reserve, who are tasked with overseeing the money supply, are treated like oracles of sorts; their pronouncements are scrutinized like the goat entrails of olden days. Fed officials are endowed with a level of power and independence given to almost no other government leaders, and the task of protecting the nation's currency is entrusted to a specially created agency, the Secret Service, that was only later given the additional responsibility of protecting the life of the president.

Perhaps the most famous, if flawed, oracle of the Federal Reserve, former chairman Alan Greenspan, knew that money was something that not only central bankers could create. In a speech in 1996, just as the Cypherpunks were pushing forward with their experiments, Greenspan said that he imagined that the technological revolution could bring back the potential for private money and that it might actually be a good thing:

"We could envisage proposals in the near future for issuers of electronic payment obligations, such as stored-value cards or 'digital cash,' to set up specialized issuing corporations with strong balance sheets and public credit ratings." \$

Nathaniel Popper is a reporter at The New York Times, where he has covered the intersections between Wall Street and Silicon Valley. Before joining the Times, he worked at the Los Angeles Times and the Forward. This article was excerpted from his latest book, Digital Gold: Bitcoin and the Inside Story of the Misfits and Millionaires Trying to Reinvent Money, Copyright © 2015 by Nathaniel Popper. Reprinted courtesy of Harper, an imprint of HarperCollins Publishers.



By Edward L. Morris

There is a good case for naming either Paul Warburg or Carter Glass the "father" of the Federal Reserve. Through their independent efforts — Warburg's largely between 1906 and 1912 and Glass's between 1912 and 1913 — each was key to the formation of America's only enduring central bank. But they were strange bedfellows and didn't care much for each other — and each was loath to give the other credit for the Fed's creation.

Warburg was part of a prominent German banking family and immigrated to America to join the powerful Wall Street partnership of Kuhn, Loeb & Co. He played an important role in raising money from international investors to finance American business, and was, purportedly, the inspiration for the Daddy Warbucks character in the Little Orphan Annie comic strip.

Paul Warburg (left) and Carter Glass (right) may be considered reluctant co-fathers of the Federal Reserve.

By contrast, Glass was a combative, self-educated Democratic congressman who grew up in the South during the hardscrabble years of Reconstruction. His views were closely aligned with the antibanking populist William Jennings Bryan; he referred to Wall Street bankers like Warburg as "money devils."

From the time he came to the United States in 1902, Warburg was mystified that the country, on its way to becoming the largest economy in the world, had no institution to provide liquidity and orderliness to its banking system, and, most worrisome, there was no lender of last resort to quell the crescendo of financial panics that plagued the country during the latter half of the 19th century. He used his prominence on Wall Street to sound warnings about the escalating dangers of operating without a central bank, and, in a prescient 1906 speech before the New York Chamber of Commerce, he spoke of a coming financial catastrophe: "I do not like to play the role of Cassandra, but mark what I say. If this condition of affairs is not changed, and changed soon, we will

get a panic in this country compared to which those which have preceded it will look like child's play."

Later that year the financial catastrophe Warburg warned of appeared in the form of the Panic of 1907. That panic, like those that preceded it, started small but grew in virulence and quickly spread throughout the banking system until it was finally quelled by the 70-year-old J. Pierpont Morgan. Operating from the library of his midtown home, Morgan acted as a *de facto* central bank for the nation, assembling emergency funding and commitments from other bankers and from the US Treasury Department.

Morgan limited the panic's damage and halted its spread to Wall Street's largest banks, but finally the consequences of operating without a central bank became apparent to many lawmakers, including Republican Nelson Aldrich, the chairman of the Finance Committee of the US Senate. After the harrowing but ultimately successful resolution to the Panic of 1907, Aldrich stated what was increasingly obvious: "Something has got to be done. We

may not always have Pierpont Morgan with us to meet a banking crisis."

As a first step towards reform, Aldrich pushed the passage of the Aldrich-Vreeland Act through Congress in May 1908, with one of its key provisions being the establishment of the National Monetary Commission to study central banking practices in other countries. He also made it a point to meet with Warburg and, after hearing his views on central banking issues, Aldrich invited him to address his commission at a meeting at New York's Metropolitan Club. Although Warburg was a proponent of European-style currency management that allowed for sensible adjustments of the money supply to safeguard the financial system and promote the economy, he did not argue that a US central bank, like those in Europe, needed to operate independently from the federal government. And with the geographic expanse of the country, he suggested setting up a network of central banks rather than a single bank in New York or some other money market city.

Aldrich embraced Warburg's ideas and brought him and a group of leading American financiers to a secret, several day meeting in November of 1910 at the stately Jekyll Island Club off the barrier reefs of Georgia. The purpose of the meeting, where Warburg was a "first among equals," was to structure an American style central bank, and by the time the conferees boarded Aldrich's private railroad car for the return trip from Georgia, the first version of the so-called Aldrich Plan had been created.

The plan envisioned a National Reserve Association that would conduct its business through a string of 15 interconnected banks throughout the United States. Under the Aldrich Plan the governance of the National Reserve would be controlled by a mix of private bankers and government policy makers. The association would, in accordance with Warburg's conception, rediscount commercial paper offered to it by member banks to provide enhanced liquidity and increase the elasticity of the money supply. And it would serve as a fiscal agent for the US Treasury in gathering reserves held at the association's banks in the event a lender of last resort was needed.

In early 1912, a little over a year following the Jekyll Island meeting, Aldrich presented the National Monetary Commission's final report, with the Warburg-inspired Aldrich Plan as its spine. The Aldrich Plan became the Aldrich Bill, but, with none of the three presidential candidates endorsing it, the bill went nowhere in Congress during the 1912 election year. Teddy Roosevelt, who ran under the Bull Moose Party, had earlier expressed support for a central bank and suggested that Warburg would be the ideal person to run it: "Why not give Mr. Warburg the job? He would be the financial boss, and I would be the political boss, and we could run the country together."

But not long after, Roosevelt pulled his support, citing a belated concern that the Aldrich Plan would place the country's currency and credit system in private hands, not subject to effective public control. Even the Republican candidate, Howard Taft, in his unsuccessful run as the incumbent, failed to endorse the plan.

But the most vehement opposition to the Aldrich Bill came from the Democrats. Bryan was a powerful force at the party's stormy 1912 convention, and he viewed central banking as an activity that benefited only the interests of the Eastern banking elite. As a condition for releasing his delegates to Woodrow Wilson, he promoted a plank in the party's platform that stated, "The Democratic Party is opposed to the Aldrich Plan or a central bank."

After Wilson trounced Taft and Roosevelt, with his fellow Democrats gaining firm control of both houses of Congress, it appeared to Warburg that the efforts for bank reform had been for naught. He was certain that the Democrats—belonging to a party, in Warburg's opinion, that was controlled by "a powerful wing wedded to the wildest monetary and banking doctrines"—would let the Unites States operate for the indefinite future without a central bank.

But Warburg was wrong. Glass understood the financial perils the country would face without a central bank and emerged as a champion of a banking reform. He identified the "Siamese twins of disorder" - an inelastic currency and a fractionated reserve system - and believed that, without a central bank, it was just a matter of time until the next financial panic surfaced. (Glass knew the country needed a central bank, but, given his party's well-known position on central banking, he avoided calling it that. Even much later, when writing about the creation of the Federal Reserve, Glass clarified that "wherever the term 'central bank' occurs in this narrative it means a

'central bank of banks' dealing only with the member bank of a system and not a central bank in the European sense, transacting business with the public.")

Glass didn't wait long after the 1912 elections to move on bank reform. He traveled through snow on the day after Christmas, from Lynchburg, Virginia to Wilson's home in Princeton, New Jersey, to present the president-elect with an alternative to the Aldrich Plan. After Wilson gave his approval in principle, Glass went to work in earnest. He received assistance from able committee members and staff, but any tracing of the bill's progress shows Glass pulling the laboring oar. The passage of the Federal Reserve Act (initially the Glass-Owen Bank and Currency Act) was in large part a Glass production with a fairly quick - if sometimes heated - reconciliation achieved between the House and Senate versions. Wilson signed the Act into law in December 1913, almost one year to the day that Glass raised the central bank topic with him.

Glass's legislative accomplishment was remarkable not just for its speed, but for the re-evaluation of the central bank issue he prompted among his fellow Democrats. Perhaps only Glass, with his populist bona fides could have engineered such a policy turnaround. The five-foot-four Glass had long established himself among his fellow Democrats as a self-proclaimed David up against the banking Goliaths. His maiden speech in Congress, in fact, was a denunciation of the 1908 Aldrich-Vreeland Act, and he was steadfast in his opposition to the 1912 Aldrich Plan.

Yet it is hard to refute the notion that much of the final legislation that Glass championed was merely a refashioned Aldrich Plan. The name of the new banking system was changed from the National Reserve as conceived by the Republicans to the Federal Reserve, and the number of reserve banks was reduced from 15 to 12. Furthermore, two of the major differences of substance between the Aldrich Plan and the Federal Reserve Act—the Fed's governance and the backing of the currency—resulted not from Glass's initiatives, but from those of Wilson and Bryan.

Glass, like the Republicans, felt strongly that a board composed *entirely* of government officials and appointees would subject the Federal Reserve to undue political influence. But Bryan, now Secretary of State in Wilson's administration, was still

an important voice on banking in Wilson's cabinet and he argued strenuously that *any* representation from the business community on the Federal Reserve board was inappropriate.

Wilson was eventually brought in as a tie-breaker to make the final decision on the composition of the board. In a meeting convened to win over Wilson's support for a balanced board, Glass summoned prominent members from the American Bankers Association to visit with the president in the White House for the purpose of reinforcing Glass's arguments. Each had his say, with an approving Glass looking on. But at the end of their presentations Wilson asked: "Will one of you gentlemen tell me in what civilized country on the earth there are important government boards of control on which private interests are represented?" There being no effective rejoinder from the bankers, the progressive arm of the Democratic Party carried the day and the Federal Reserve wound up with a board composed entirely of presidential appointees - and with its headquarters in Washington, DC.

Glass and Bryan remained at loggerheads over other issues during the crafting of the Federal Reserve Act, and Wilson was again brought in as a tie-breaker. When Senator Robert Owen, heading the Senate's legislative efforts, sided with Bryan on the matter of a US backing of the currency, as opposed to relying on the inherent security of the proposed Federal Reserve notes, the issue wound up on President Wilson's desk.

Glass believed that Bryan's stance showed a profound lack of understanding about the more than ample safety of the proposed Federal Reserve note, and he pleaded earnestly with the president to withhold his support for formal government backing. Wilson listened attentively to Glass's argument and concurred with his reasoning, but, in a nod to Bryan's intransience on the issue, suggested that the congressman "surrender the shadow but save the substance" by preserving the full faith and credit government guaranty. Glass was not happy on this issue but ultimately agreed to go along with the "innocuous camouflage."

Even with these changes, the Federal Reserve Act still owed much to the structure that Warburg and the Republicans had shaped as the Aldrich Plan. And the gentlemanly Warburg would have likely lived out the rest of his life comfortable in the knowledge that he had made significant, if not widely appreciated, contributions to his adopted country through his early work in the creation of the Federal Reserve.

But in 1927, 14 years after the passage of the Federal Reserve Act, Glass wrote An Adventure in Constructive Finance, a memoir that recalled the behind-thescenes politics required to craft the legislation creating the Federal Reserve System. Glass, who is better known today as one of the two sponsors of the 1933 Glass-Steagall Act, opened his book by stating, "It's not especially important to have it precisely determined who was the author of what is known as the Federal Reserve Act." But in the following chapters of the book he laid out a highly charged argument for himself - or, alternatively, in a polite demurer, for Woodrow Wilson - as the rightful father of the Federal Reserve.

Warburg found it galling to read Glass's rhapsodic and self-aggrandizing account of the Federal Reserve's creation without ascribing any contribution from others. So in rebuttal to Glass's slapdash and hyperbolic Adventure, Warburg spent much of the following three years writing a massive and scholarly retort titled, The Federal Reserve System: Its Origin and Growth. He created a two-volume tome, with each volume exceeding 800 pages, and there is little doubt what motivated his writing it: "Miss Clio, the Muse of History," Warburg wrote, "is a stubborn lady, entirely devoid of a sense of humor, and once she has made up her mind, it is exasperatingly difficult to alter her verdict. It is inadvisable, therefore, to delay too long the correction of inaccuracies, particularly in cases where silence might fairly be construed as assent."

In Warburg's Federal Reserve System he sought to set the record straight. Taking on Glass's assertion that the Act was a one year, Democratic creation, Warburg made a more expansionary case, stating, "In order to be accorded its proper place, the reserve system must be looked upon as a national monument, like the old cathedrals of Europe, which were the work of many generations and of many masters, and are treasured as symbols of national achievement."

Warburg traced the origins of the Federal Reserve to the seminal November 1910 Jekyll Island meeting at which the Aldrich Plan was hatched. Then in a methodical

style much like an extended lawyer's brief, Warburg provided a side-by-side comparison of the Aldrich Bill with the Federal Reserve Act. It's doubtful that many readers, then or since, have taken the time to study Warburg's section-by-section analysis, but even a cursory review shows that the bills are remarkably similar.

So who is the rightful father of the Fed? The evidence is strong that the substance of the Federal Reserve Act of 1913 may owe more to Warburg than to Glass. Yet the evidence is equally strong that the Act would not have been passed without Glass's political skills. Perhaps the paternity should be shared, with Warburg the intellectual father of the Federal Reserve and Glass its political father.

President Wilson's actions after the Act's passage would seem to support the shared arrangement. He appointed Warburg as the Fed's first vice chairman—and it is likely that he would have been appointed chairman, but for the requirement at the time that the Secretary of the Treasury serve in that capacity. A few years later, Wilson appointed Glass as his Secretary of the Treasury. The two appointments were not just honoraria, of course, but they no doubt reflected Wilson's recognition of the crucial roles Warburg and Glass played in the Fed's creation. \$

Edward L. Morris is professor of finance and former dean of the Plaster School of Business and Entrepreneurship at Lindenwood University. This article has been adapted from his latest book, Wall Streeters, with the permission of the publisher. Copyright (c) 2015 Columbia University Press. All rights reserved.

Sources

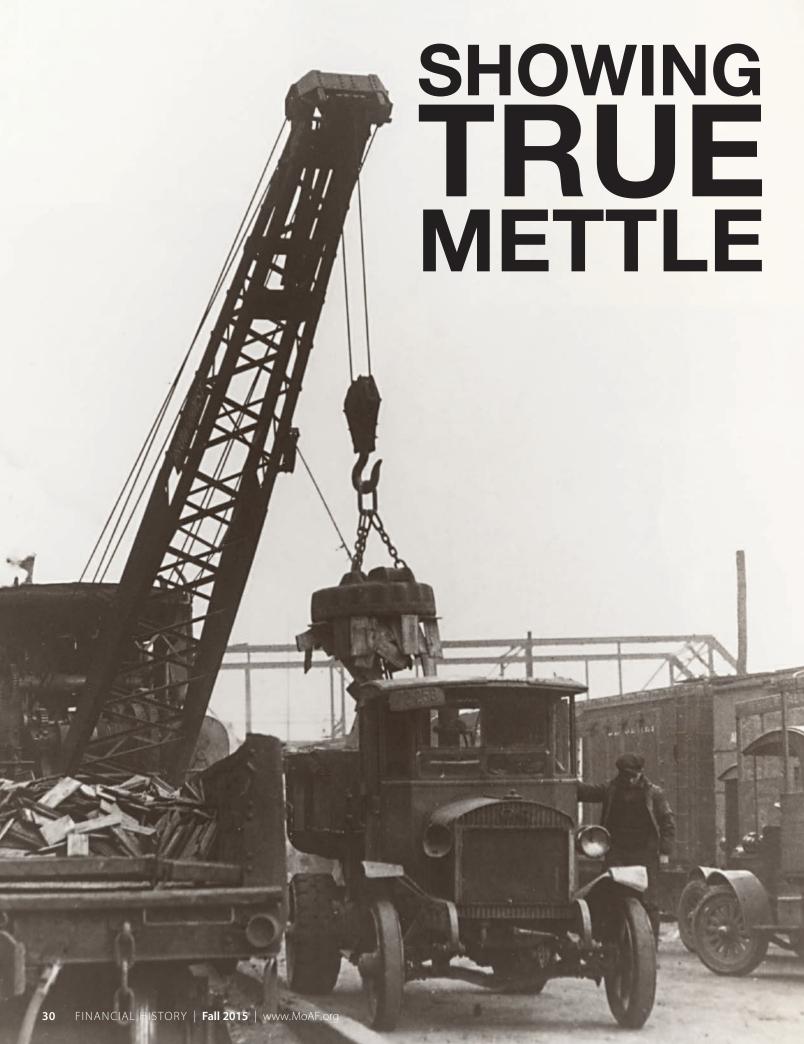
Chernow, Ron. The House of Morgan: An American Dynasty and the Rise of American Finance. New York: Grove. 1996.

Chernow, Ron. The Warburgs: The Twentieth-Century Odyssey of a Remarkable Jewish Family. New York: Random House. 1993.

Glass, Carter. *An Adventure in Constructive Finance*. Garden City, NJ: Doubleday. 1927.

Mack, Vicki A. "Frank Vanderlip and the Founding of the Fed." *Financial History*. Winter 2014.

Warburg, Paul M. *The Federal Reserve System: Its Origin and Growth.* New York: Macmillan. 1930.



Starting as a scrap operator in 1915, Commercial Metals celebrates a century

By Gregory DL Morris

Fallen Giants Litter the field in the North American iron and steel business. Andrew Carnegie's United States Steel, formed under the hand of JP Morgan in 1901, was the first billion-dollar corporation. It remains the largest integrated steelmaker in the country, but not without struggling mightily. Those same struggles, financial and operational, claimed Bethlehem Steel, at one time the second-largest steelmaker in the country.

Just 10 years after the founding of US Steel, Moses Feldman founded an enterprise of slightly more modest scale: a scrap business in Dallas that came to be Commercial Metals Company (CMC). Feldman, an immigrant from Russia, gradually established himself in the industry, and by the mid-1920s his company was one of the leading secondary metals dealers in the area. Moses ran the business until 1932, when his son, Jacob, took over.

Through the decades CMC grew by expansion and acquisition, eventually integrating downstream to steelmaking and diversifying into some related industries. The company went public on the American Stock Exchange in 1960 and today has 200 facilities in almost two dozen countries.

"Moses was the founder and built the business," said Joseph Alvarado, CMC's chairman of the board, president and CEO. "He did make some mistakes, but Jake got us out of them. I believe he had gone into another business and came back to help his father."

In one of those powerful and resonant stories from the Depression, Alvarado said at one point the bank was moving to

A crane unloading scrap metal from a Model T pick-up truck in the early 1920s. Many scrap dealers in this era still relied on mule-drawn wagons to gather scrap.

foreclose. "Jake went into the bank with the keys, but persuaded them to stick with him and the company. They did, and the company gutted it out through the Depression."

Stanley Rabin, former CEO, had 28 years with CMC, retiring in 2008. "I overlapped a few years with Jake Feldman. He would always relate stories about the Depression; nothing major, just little things to get through a day at a time."

In a small irony, the Depression was not the toughest test for CMC or the scrap industry. Times were tough all over to be sure, but with people selling what they could, it was a buyers' market. Public works and even some big private ventures—such as the Empire State Building, completed in 1930—kept some demand for steel.

Once the United States entered World War II, the collection and processing of scrap metal became a component of the war effort. Steel mills, metal producers and foundries converted to war production plants making tanks, guns and ships. Americans were instructed to take their scrap metal to their local scrap yard for recycling. CMC operated at full capacity and bought and sold scrap at a rapid pace. The war years presented CMC the opportunity to both make a profit and play a part in the war effort.

Peace brought prosperity in the postwar boom. A small part of that boom was manifest a few hundred miles southwest of Dallas in Seguin, Texas, between San Antonio and Austin. Marvin Selig founded Structural Metals (SMI) there in 1947. It was literally a greenfield operation, built on what had been a cornfield, and started as a rolling mill, rolling rail to produce reinforcing bar, or rebar, the lattice of steel inside large concrete columns.

In 1949, the first rebar was rolled and sold. In three months the company was profitable, and it produced 2,300 tons of rebar in its first year of operation. Customers included steel fabricators, steel supply companies, contractors and the Texas Highway Department. By 1951, SMI had expanded into steel fabrication. It was an

important downstream step for a company that would in decades to come be distinguished for its vertical integration. According to Alvarado, Marvin was a visionary.

"He was originally from New York City and worked in a machine shop in his youth. He then served at sea, then got his engineering degree at the University of Texas under the GI Bill," Alvarado said. "He bought cheap land and used equipment. He had a keen sense for buying and building, bordering on genius for both equipment and leadership. He followed his dream."

The relationship between the two companies began as straight business, with CMC supplying Structural Metals with scrap. When times got tight, CMC agreed to equity in lieu of debt and eventually acquired the whole operation, with Selig staying on and the steelmaking operating autonomously.

In 1960, CMC became the first secondary metals company to be listed on a major stock exchange, the American Stock Exchange. And in 1963, CMC acquired its initial stake in Structural Metals, marking its entry to steelmaking. The timing was propitious: Structural Metals had just expanded upstream itself from rolling mill to steelmaking, not by building a blast furnace, but by building an electric arc furnace or minimill. It was the minimill revolution, along with legacy costs and labor upheavals, that would doom more than a few steelmakers in North America and worldwide (see sidebar).

"The early '60s were a very difficult period for the company," Rabin said. "There were several factors. The Japanese, who had been big buyers for scrap, pulled out, prices dropped; all companies were affected. That became a motivating factor in our vertical integration: to diminish the cyclicality of a commodity business."

Rabin is careful to note that "vertical integration is different than conglomeration [which was very much in favor at that time]. We were adding value and moving closer to the most important markets."



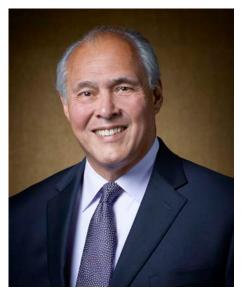
Stan Rabin, CEO of CMC from 1979–2006 and chairman of the board from 1999–2008

CMC also got into trading, initially to control supply and price of raw materials, but eventually as a business unto itself. "We had markets that smaller dealers could not access," said Rabin. "Logically [and logistically] that grew from scrap

into iron ore, copper and aluminum. In our integration we always kept internal pricing at market levels. It was my view that we did not want to subsidize our businesses one over the other. Each had to be profitable on its own."

Clearly that was the case, because in 1970, CMC grew to be listed on the *Fortune* 500. Throughout the 1980s, the company continued vertical integration and growth, adding to its operations in recycling, manufacturing, fabrication and trading. CMC also expanded its downstream presence with the addition of construction-related operations.

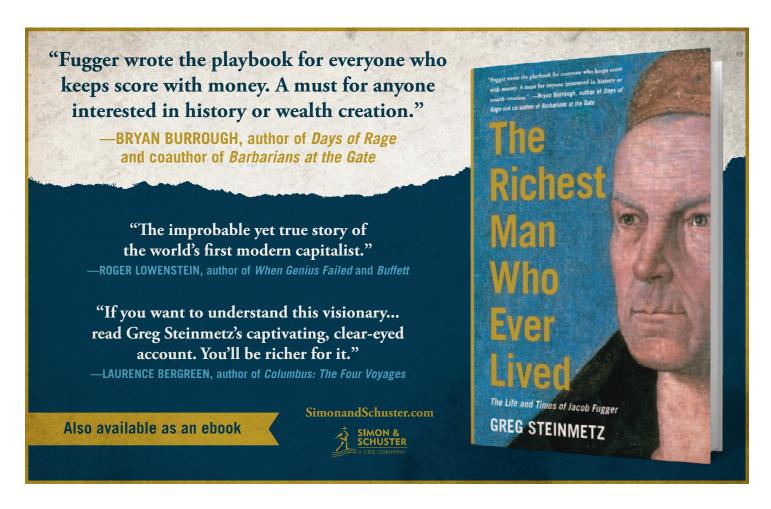
To further increase its manufacturing base and expand its geographic presence, CMC acquired Owen Steel in 1994. The largest acquisition to date, the Owen deal also gave CMC a total of six rebar fabrication shops, five structural fabrication shops and two joist plants. Those operations are spread across South Carolina, North Carolina, Florida, Georgia and



Joe Alvarado, president & CEO of CMC from 2011–present and chairman of the board from 2013–present

Virginia. Beyond the manufacturing sites, CMC operates a construction supply company and three scrap-processing facilities.

The chair of Owen Steel, Dorothy Owen, took her share of the payment entirely in CMC stock, making her the company's



From Puddlers to Minimills

The business of steelmaking is a recurring story of entrenched interests resisting change, only to see the industry pass them by. To be fair, it is the heaviest of heavy industries, with huge facilities tying down vast amounts of capital. It was not simply JP Morgan's largesse that made US Steel the first billion-dollar company; it was sheer necessity.

From ancient times through the middle 1800s, steel was made through time- and labor-intensive processes that consumed great amounts of energy and resources for a very limited volume of finished material. That is why steel was reserved for essential tools, including weapons. Industrialized war brought the need for more steel of higher quality than could be made by "puddling," an early industrialized process that was better than its cottage predecessors.

Sir Henry Bessemer is credited with inventing a quantum improvement in steelmaking, a process that still bears his name. Iron, coke (roasted coal) and limestone are melted together in a blast furnace. Then hot air is blasted through the melt. Impurities form a slag on the top of the melt, and steel is tapped from the bottom.

Demand for steel boomed with the Crimean War (1853–56). Timing is everything. The Bessemer process was a vast improvement over previous methods, but it still needed much refinement. One of Bessemer's biggest mills was

in Sheffield, to this day a name associated with steel. Not surprisingly, patent battles raged for many years over tweaks and improvements in operations and metallurgy. Also not surprisingly, the puddlers' guild in England was powerful and resisted the new technology.

American Alexander Lyman Holley visited Sheffield and licensed the Bessemer process for steelmaking in the United States just in time for the American Civil War (1861–65). Timing is everything. Holley and his partners improved the process further, building a show-piece furnace and mill in Troy, New York. Andrew Carnegie took note.

The first electric-arc furnace in the United States began operations in 1907 in Syracuse, New York, just six years after Carnegie Steel swept up most of the competition to form US Steel. The electric furnace is much simpler than the blast furnace. Shredded scrap steel is loaded into the furnace, along with flux materials to improve conductivity. The furnace is closed, and graphite electrodes begin to melt the steel. A great deal of power is needed, but the system is much less energy and capital intensive than a blast furnace: capital costs can be as little as 15-25 cents on the dollar for a blast furnace.

As with the Bessemer process, electric furnaces needed much experimentation and refinement. The big integrated steel mills did not so much dismiss the

technology out of hand, as relegate it to lesser roles. They stuck with the blast furnaces that represented so much sunk capital.

By the middle of the 1900s, a century after Bessemer, the electric furnace was ready for prime time. Demand from war was not the catalyst this time. Quite to the contrary, it was supply for scrap and lack of demand for steel that allowed the electric furnace to overtake the blast furnace. The rise of global manufacturing and the concurrent decline in US manufacturing meant a slump in domestic steel prices.

General economic decline in the United States meant that plenty of scrap was available, lowering raw material costs for the arc operators. Most of them were new mills—one vanguard was a firm called Nucor—without legacy labor, capital or environmental burdens. Big integrated companies like US Steel and Bethlehem were saddled with huge capital costs, contentious labor relations, heavy pension liabilities and, in many cases, hidebound ideologies.

Today it is not possible to differentiate minimills from integrated companies. The largest electric furnace operators are integrated themselves upstream into scrap and downstream into rolling mills. US Steel and the surviving other legacy steelmakers operate electric furnaces as well as blast furnaces.

second-largest shareholder after the Feldman family. She served on CMC's board of directors for 16 years. CMC immediately devoted capital investment and inhouse expertise to upgrade the mill, which was renamed SMI-Owen Steel (now CMC Steel South Carolina) and achieved profitability by fiscal 1997.

By the turn of the century, CMC owned four steel mills, in Seguin, Texas; Magnolia, Arkansas; Birmingham, Alabama and Columbia, South Carolina. In 2003, CMC purchased a major Polish steel mill in Zawiercie, which is currently the

company's largest mill, producing rebar, merchants and wire rod.

Even as it grows and brings in new operations, CMC seems to be making history, not just steel. "The Polish plant is 112 years old," said Alvarado, "We have been able to celebrate that legacy as well as the history here in North America. Whenever I visit one of our newer operations there is a very strong sense that it is a part of the company, part of the legacy, part of the celebration, even if they just joined recently."

Rabin added, "as we were building a company, were also building a culture of

integrity, loyalty and accountability. That might sound like marketing, but we were one of the first public companies to put out a code of conduct. We stated that we were not going to do business in places where we thought ethics were lacking." \$

Gregory DL Morris is an independent business journalist, principal of Enterprise & Industry Historic Research (www.enterpriseandindustry.com) and an active member of the Museum's editorial board.



A Deluxe Centennial



Deluxe Corporation

By Bart Ward

In 1915, World War I was in full swing, Einstein published his *General Theory of Relativity*, Tesla and Edison were ignored by the Nobel Prize committee, Gandhi returned to India from South Africa, Alexander Graham Bell made the first transcontinental call and Frank Sinatra was born. That same year, William Roy (W.R.) Hotchkiss founded what would become Deluxe Check Printing, in St. Paul, Minnesota.

Checking printing at the time was regional and mostly used by the business community. Some 90% of businesses used checks for payment transactions, with the public using bank counter checks for their personal use. In fact, bank counter checks were often distributed by various banks to stores that then made them available to customers who filled in their names and addresses on the checks where they banked.

When Hotchkiss started his business, America was booming from World War I, and the Federal Reserve Bank of the Ninth District was located in Minneapolis. The Federal Reserve System had been created in 1913 through the Federal Reserve Act, and check clearing was part of the Fed's job as mandated by Congress. According to the *The Federal Reserve System—Purposes and Functions* publication:

By creating the Federal Reserve System, Congress intended to eliminate the severe financial crises that had periodically swept the nation, especially the sort of financial panic that occurred in 1907. During that episode, payments were disrupted throughout the country because many banks and clearinghouses refused to clear checks drawn on certain other banks, a practice that contributed to the failure of otherwise solvent banks. To address these problems, Congress gave the Federal Reserve System the authority to establish a nationwide check-clearing system.

Top: Deluxe's original plant in St. Paul, Minnesota. Bottom: Inside Deluxe's printing plant.

The strategic location of Hotchkiss's business to the Federal Reserve bank meant that Minneapolis/St. Paul would become a regional banking center.

Hotchkiss was born on March 21, 1876, in Whitewater, Wisconsin. At 10 years of age, he started working for a local newspaper where he learned printing skills. He would become co-owner of the Dunn County News in Menomonie, Wisconsin—a respected newspaper. After trying his hand at a number of jobs, at age 32 he decided to pursue check printing, a job he had helped a friend with several years prior. With \$300 of borrowed money, Hotchkiss set up shop in the People's Bank Building in St. Paul on November 23, 1915.

Checking has a long history, likely dating to the Romans in the fourth century BC. There is some evidence that the Romans used "praescriptiones," which seem to be tied to a credit function, rather than a debit function. A form of a check, known as a "sak," appeared in the ninth century. Saks were used by merchants and could be cashed in various countries. The widespread usage of "depositor notes" really took off in Amsterdam in the 1500s. Depositors would leave their money with Dutch "cashiers," who in return would pay the debts of depositors with the notes.

The word "check" most likely came about in 18th century England, where the first printed checks are attributed to British banker Lawrence Childs in 1762. Around that time, tracking began with the use of serial numbers so people could "check on them." Eventually clearing-houses were set up so that banks could easily provide settlement, without doing each check individually bank by bank.

By the time Hotchkiss set up shop, checking had been institutionalized in the United States. His hard work and noted service policy of "in one day, out the next" would kick start the business. This policy was a commitment to turn mail order checks around in 48 hours. His first big break came in December 1915, from the Adrian State Bank in Southern Minnesota. The order was for 200 pocket checks for 70 cents.

By 1916, Hotchkiss was able to land a number of large Minnesota banks, in addition to small country banks. That October, Einer Swanson joined the company as partner, adding a sales presence to the firm. By 1919, the company relocated to a two-story building in St. Paul. On March 15, 1920, The Deluxe Check Printers, Inc. was incorporated under Minnesota law.

As the end of World War I ushered in a new era of consumer spending, and the Jazz Age and the Roaring '20s came about, Deluxe was in a sweet spot to increase its sales—and it did. In 1923, Hotchkiss invented The Hotchkiss Imprinting Press (HIP). This allowed Deluxe to print three checks on a page. By 1929, the company's revenues grew to \$579,000. Hotchkiss stuck to his slogan of "asking for business solely on the basis of quality, service and price, backed by a guarantee of satisfaction."

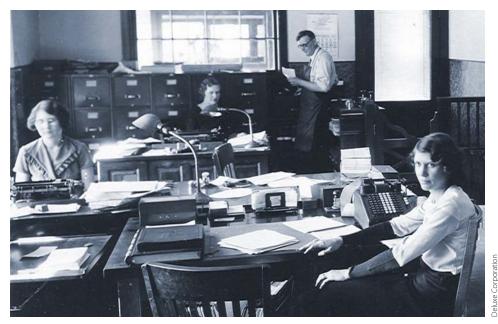
In the meantime, other newcomers to check printing were starting up. By 1922, Checks Express had been founded, which eventually became part of Clarke American and is Harland Clarke today. Harland was founded by John Harland in 1923 and began printing checks in 1930. Another start-up to enter the industry around that time was the Check Printing Company, started in 1927 in Northeast Portland, Oregon.

At Deluxe, the 1920s were all about expansion. They developed a relatively simple formula that would extend to all of the cities with Federal Reserve banks—all 12 district headquarters. Chicago was the first, followed by Kansas City and Cleveland. In the mid-1920s, Hotchkiss invented the two-way perforator to attach to the HIP, which allowed for "automatically perforated horizontally and vertically at the press instead of in the bindery." Next in line was the Hotchkiss Lithograph Press—a small lithograph press that made the company more efficient when printing checks.

Hotchkiss began to concentrate on inventing and improving printing equipment, in order to make checks and check recording easier and more convenient for the end customer. He invented the "handy pocket check," with a horizontal check register on top of the checkbook, a convenient feature the company marketed to customers. In one of Deluxe's 1920s catalogs, the copy read, "The Individualized Check today is considered almost as necessary in leading social and business circles as the calling or business card. It marks the user as a man of distinction and discrimination."







Deluxe office, circa 1933.

The Crash of 1929 ushered in the Great Depression, which hurt Deluxe along with most other businesses. Deluxe was a private company, so its stock price was not affected by the crash. However, as the 1930s progressed, "Deluxe's vulnerability was directly linked to its bank customers, who were embroiled in the worst banking crisis in the nation's history." Sales declined in 1932–33.

As the company struggled, Hotchkiss solicited his employees' advice, which was highly unusual in corporate America at the time. According to the company's official history, the employees "opted for a six-hour work day...accepted wage reductions (cuts extended to the highest levels of the company, including Hotchkiss's and other officers' salaries)...[and] when Deluxe had problems meeting payroll, Deluxers often agreed to forego a paycheck until banks paid their bills." Deluxe continued on as a mail order house.

Then, in 1932, Hotchkiss hired George W. McSweeney as sales manager. Until then, Deluxe had a one-person sales force; this would change dramatically, as McSweeney was a powerhouse who "proved to be a dynamic, inspirational leader and transformed the company's sales strategy." By 1938, Deluxe employed seven sales representatives who, under McSweeney, were selling a service instead

of a product, emphasizing print quality, offering two-day imprinting services and guaranteeing satisfaction along with its "standardized check program."

McSweeney would also cater to smaller clients, as opposed to strictly providing checks to businesses. This process proved to be educational, as banks resisted providing checks to the average person with a small account. This led to the introduction of Deluxe's Personalized Check Program in March 1939, which became a success in short order. McSweeney said at the time, "We seem to have hold of something which is a lot bigger than we first thought, and we are stepping out with the complete program well ahead of any others in the industry." This was all happening on the eve of World War II.

While the war negatively affected many businesses, Deluxe managed to do well. On its 25th anniversary in 1940, sales surpassed the \$1 million mark. McSweeney was promoted to president, and the company printed checks for the government's ration banking program. This increased sales by over 30%, and by 1945 company sales were \$2.3 million. Hotchkiss by this time was semi-retired, and in September of 1941 he officially retired. He died in 1948 at the age of 72.

After the war, Deluxe established new plants in Kansas City, Chicago and St.

Paul. Platemaking and lithography departments were set up in Newark, New Jersey, and Deluxe Cleveland moved into new offices. The use of checks increased substantially from the mid-1940s into the 1950s. By 1949, plans were underway for a new "territorial plant" in Paili, Pennsylvania. From the mid-1950s to 1960, new operations were set up in Indianapolis, Indiana; Dallas, Texas; Chatsworth, California and Detroit, Michigan.

Check usage was swamping the bank check processing systems in use at the time, and a new system called magnetic ink character recognition (MICR) was created in 1959. This was a major innovation in check processing, and Deluxe "emerged as the authority on magnetic ink printing, pushed by McSweeney." The company grew substantially during this time, but on July 20, 1962, McSweeney died unexpectedly. According to the company's history, he left a "legacy of monumental contributions to the company. Without him, it is doubtful that Deluxe would have become the leader in the check printing industry."

Joe Rose, a 33-year Deluxe veteran, became president of the company, just in time for major changes in the industry during early 1960s. Credit cards began to take hold, and many predicted the death of checks. Deluxe's New Products Research Division, headed by Gene Olson,

wasted no time in adapting, and by the early- to mid-1960s, Deluxe and its customers realized that MICR could be used for processing many different types of documents.

New Products opened an operation in Roseville, Minnesota as a result of a request to process in excess of "20 million process control documents and loan coupon books." In addition, Olson and his team found ways to use MICR to process savings and withdrawal tickets. By 1967, New Products was selling over \$1 million in services and was increasing its commitment to research.

As a result of new postal regulations regarding zip coding and presorting bulk mail, Rose leveraged Deluxe's mail order expertise to pioneer a deal with the US Post Office. The deal allowed Deluxe to set up postal services inside the company so that "mail sacks bypassed local sorting operations, thus eliminating handling by the post office." This helped with postage costs and sped up delivery to clients.

Next, Deluxe created Fashion Chec covers, which catered to fashion conscious customers who wanted colors, textures and designs on their checkbook covers. Pictorial "Scenic Americana" checks soon followed. These checks increased the company's income margin, and by 1969 sales were over \$80 million with income of nearly \$8 million.

The country was dealing with inflation, stagnation and gasoline shortages in the 1970s, which also challenged Deluxe. Long a "one-product" company, Deluxe continued to stick to its knitting, opening Southern and Western plants. With three plants opened a year by 1979, Deluxe was running a total of 56 plants. The company began investing in new technology and created a number of new initiatives, such as Operation Easier, Project Prevalidation and the North Star Project, which developed the Deluxe Encoder Printer (DEP). This was an evolutionary process and included Troy Computer Products and Data Card Corp.

By 1976, 64-year-old Rose moved toward retirement. Gene Olson became Deluxe's fourth president and, in 1978, its CEO. Rose needed to talk Olson into taking the job, as he doubted his capability of running the company. However, Olson proved himself to be a good leader and was the first CEO to diversify the company. His first innovation was pre-inked



Plateroom in the Deluxe Chicago plant.

endorsement stamps, which added \$1.4 million to sales.

On April 25, 1980, Deluxe became a public company, as it was listed on the New York Stock Exchange under the ticker symbol DLX. The company was a recognized leader "for its financial performance and its service and product excellence."

As banking was undergoing deregulation, Deluxe was diversifying. By the late 1980s, Deluxe moved into four businesses, bought eight companies and had three organizational units and a new name—Deluxe Corporation. As the 1990s began, the company looked very different from the days when 96% of its business was check printing—which was only five years prior. On the verge of its 75th anniversary in 1990, check printing was down to 69%.

Harold Haverty, president of Deluxe from 1986, continued to diversify the company, acquiring electronic fund transfer company ACH Systems in 1990. In 1991, it bought retail electronic check authorization company Electronic Transaction Corp., which owned "Shared Check Authorization Network (SCAN), an association of retailers nationwide who exchanged information on bad checks and closed customer accounts." Deluxe acquired mail order supplier PaperDirect in 1993 and collections agency National

Revenue Corporation the following year.

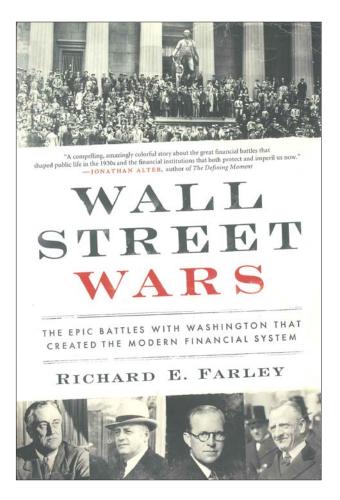
Times got tough in the mid-1990s, as the digestion of its buying spree took a toll on Deluxe's revenues. For the first time, Deluxe went outside the company and hired former AT&T and General Instruments executive John A. "Gus" Blanchard III, in May 1995. Blanchard "moved quickly and decisively to restructure and streamline operations; to identify noncore, underperforming business that should be divested; and to reestablish growth through new products, alliances and acquisitions." By the turn of the century, Blanchard had Deluxe in good shape, as the company helped business clients with Internet technologies and e-commerce solutions.

In 2004, Deluxe acquired New England Business Services, a provider of solutions to small businesses. This would help with Deluxe's new vision statement, which was to "Grow Deluxe by enabling our financial institution and small business customers to be more competitive." Under President and CEO Ronald Eilers, the company believed there was "real potential for growth in the small business market." Deluxe's Small Business Services unit "launched Deluxe Business Advantage program, the fast and easy way for banks to refer small businesses to Deluxe for checks and related products."

The drive for small business and financial institution support yielded a number of service and product initiatives during the next decade. As of 2014, the company had increased its revenue for five consecutive years. CEO Lee Schram noted, "We acquired Wausau Financial Systems and Gift Box to expand opportunities in higher growth marketing solutions and other services. We also continued to accelerate our brand transformation. In addition to our strong print leadership, we continued to invest in our employment brand, in digital technology, in extending our sales channel reach and in our communities. We ended the year [2014] with nearly 4.6 million small business customers of which approximately 25% are marketing solutions and other services customers, and we served approximately 5,600 financial institutions."

The company has come a long way in the past century, thanks to a corporate culture of entrepreneurship, invention and innovation. Over the years, "Deluxe found its niche "> continued on page 39

Wall Street Wars: The Epic Battles with Washington That Created the Modern Financial System



By Richard E. Farley Regan Arts, 2015 320 pages, \$27.95

IN Wall Street Wars, Richard E. Farley presents a very readable account of the crafting and passage of four important financial elements of President Franklin D. Roosevelt's New Deal. He does so with separate chapters on The Emergency Banking Act, Glass-Steagall Banking Act and the Securities Act of 1933, as well as the Securities Exchange Act of 1934 and its Securities and Exchange Commission. Direct quotations from contemporaneous speeches, letters and newspaper accounts, some of which take up an entire page, provide the kind of color that is lacking in many other

published accounts on this subject.

Historians give FDR much credit for persuading the general public that the bold actions he took in the first week of his administration would indeed restore the crippled banking system he had inherited. After reading Farley's account of the Emergency Banking Act and the text of Roosevelt's fireside chat describing his unprecedented steps to meet the crisis, this reviewer has a new appreciation for that suggestion. The administration's bold plan to counteract the drain on bank deposits by issuing up to \$2 billion of emergency currency was greeted with howls of disapproval from many quarters. However, because FDR had convinced the public that their bank deposits would be safe, very little of that supply was needed when the

nation's banks re-opened a week after the president had closed them.

Like much New Deal legislation, the follow-up law that would address the banking system's longer-term flaws was not a reflection of any one person's desires, but a complicated compromise containing many disparate ideas. Congressmen, such as Carter Glass and Henry Steagall, had begun investigating the undesirable effects of intermingling the activities of commercial banks and their securities affiliates even before the 1929 stock market crash. And banking reform had been an important plank in the 1932 Democratic Party platform. That year, candidate Roosevelt issued a laundry list of seven reforms of the securities and banking businesses.

As Farley makes clear, however, while the new president sought to incorporate certain principals into laws, he was quite willing to defer to congressional leaders, officials of previous administrations and hand-picked advisers when it came to crafting their final details. Even with little opposition from a chastised banking community, that multi-faceted legislation had to overcome numerous quarrels among House, Senate and administration representatives during its 16-month route through Congress. FDR supported some of Glass-Steagall's final provisions (including the separation of commercial and investment banking), but not others (federal deposit insurance).

The chapters describing new legislation regulating Wall Street feature a different set of behind-the-scenes legislators and advisers. Here too, Farley makes clear that FDR was a compromiser and a pragmatist. He rejected an early attempt to resurrect some ides from another era (1913), but leaned on a veteran of that age to fashion a more appropriate set of rules. Familiar men such as Sam Rayburn, Felix Frankfurter and Joseph Kennedy roam throughout these pages, as do such lesser-known figures as Ferdinand Pecora, Richard Whitney and Duncan Fletcher. Indeed, several dozen legislators, administration officials and outside advisers seem to have had more to do with the final versions of the Securities Act of 1933 and Securities Exchange Act of 1934 than the president.

A closing epilogue briefly notes some subsequent stories of these important laws and the men who crafted them. It leaves unanswered the interested reader's potential question: "And then what happened?" \$

Michael A. Martorelli, CFA is a Director at Fairmount Partners in West Conshohocken, Pennsylvania, and a frequent contributor to Financial History. He earned his MA in History from American Military University.

A Deluxe Centennial

continued from page 37

in inventiveness to survive and thrive through depressions, recessions, world wars and a technological revolution." Deluxe was built into a first rate American business and is now in the business of building other businesses. \$

Bart Ward is CEO of the Investment Advisory firm of Ward & Company, Ltd. Since 1993 he has written the weekly Wall Street history and market-oriented column, "The Corner." He has his degree in history from UCLA.

Sources

- Blake, Terry. *A History of Deluxe Corporation:* 1915–1990. Deluxe Corporation. 1990.
- "A Brief History of Checking." Pearson Education, Inc. 2007.

- "Celebrating a Century:100 Years of Innovation." Deluxe Corporation Annual Report. 2014.
- "The Federal Reserve System—Purposes and Functions." Board of Governors of the Federal Reserve System, Ninth Edition. 2005.
- "Getting Through Transition Is Not Easy, but Transition Represents a Path to Follow." Deluxe Corporation Annual Report. 2005.
- International Directory of Company Histories. "John H. Harland Company, Vol. 17." St. James Press. 1997.
- International Directory of Company Histories. "Deluxe Corporation, Vol. 22." St. James Press. 1998.
- O'Neil, Erin. "The History of the Checking Account." Banks.com. February 7, 2014.
- Woodards, Chris. "A Brief History of Checking Accounts." Ezine Articles. January 3, 2011.

Cross of Gold

continued from page 23

maintaining a gold reserve of \$150 million in gold coin and bullion.

On April 5, 1933, during his first term as president in the dark days of the Great Depression, Franklin D. Roosevelt dealt a body blow to the gold standard by ordering all gold coins, gold bullion and gold certificates turned into the Federal Reserve at the price of \$20.67 per ounce, increased two months later to \$35 per ounce. With this tactic, Roosevelt sought to counter the deflation, which he believed was holding back the economy.

Almost four decades later, on August 15, 1971, President Richard Nixon, in an effort to head off a pending international gold run and to combat domestic inflation, announced that the United States would no longer convert dollars to gold at a fixed price. It was the last gasp of American allegiance to the gold standard.

In 1953, a poll of 277 professors of American history or government found William Jennings Bryan's "Cross of Gold" speech to be among the top 50 "most significant" documents in the history of the United States. \$

Ron Hunka, a freelance writer who lives in Austin, Texas, has written several articles for Financial History about notorious frauds, mainly in Texas. Elsewhere, he has published articles about the history of notable castles and monasteries he visited in Germany, Austria, Switzerland and Liechtenstein.

Sources

- Berg, A. Scott. *Wilson*. New York: G.P. Putnam's Sons. 2013.
- Bryan, Steven. *The Gold Standard at the Turn of the Twentieth Century*. New York: Columbia University Press. 2010.
- Encyclopedia of American History. The Development of the Industrial United States, 1870 to 1899, Revised Edition, vol. VI. "Coinage Act, 1873."
- Kazin, Michael. *A Godly Hero: The Life of William Jennings Bryan*. New York: Alfred A. Knopf, Inc., 2006.
- Leinwand, Gerald. William Jennings Bryan: An Uncertain Trumpet. Rowman & Littlefield Publishers, Inc. 2007.

TRIVA By Bob Shabazian QUIZ

- 1. Who was Ida May Fuller?
- 2. What is the Fed Funds Rate?
- **3.** Forbes magazine recently ranked the NFL Dallas Cowboys as the world's most valuable sports franchise. What is its estimated value?
- **4.** When did coal production begin in the United States?
- **5.** How is a company's market capitalization determined?
- **6.** What distinguishes a bear market from a market correction?
- 7. Volatile markets can result in wild swings in the Dow Jones Industrial Average. What was the largest single day point drop in this average? What was the biggest single day percentage loss?
- **8.** The S&P 500 stock index closed above 100 on June 4, 1968. How many years went by before it closed above 1,000?
- **9.** The Federal Reserve System consists of 12 regional banks. Who heads the New York Federal Reserve Bank?
- **10.** The Treasury recently announced it will replace the portrait on the \$10 bill with a woman in 2020. Who is currently on the \$10 bill?

Dudley. 10. Alexander Hamilton. 1,000 on February 2, 1998. 9. William C. October 19, 1987. 8. 30 years, closing above single day percentage loss was 22.61% on index plummeted 777.68 points. The largest market. 7. On September 29, 2008, the talls 20% or more, it is viewed as a bear viewed as a correction. It an index or stock more from a recent high, the movement is 6. Generally, if an index or stock falls 10% or the number of shares outstanding. 2. By multiplying the price of the stock by materiel during the Revolutionary War. the production of shot, shells and other war around Richmond, Virginia. Coal was used in 3. About \$4 billion. 4. In 1748, in the mines in the late 1980s it was as high as 20%. loans. Now at an historical low near U%, that banks charge each other for overnight amount of \$22.50. 2. The interest rate security check, dated January 31, 1940, in the 1. Ida May Fuller received the first social

IT'S YOUR BUSINESS.

Ioin the Museum's

Corporate Membership Program

Put your company's support behind the Museum's work to teach financial empowerment using the lessons of financial history

Corporate memberships can include the following benefits:

- Free admission for employees and their guests
- Private tour of the Museum for up to 50 people
- Acknowledgment on the Museum's website, in *Financial History* magazine, and in all other relevant publicity
- Special invitations to Museum openings and events
- Opportunity to rent Museum spaces



For information, please contact Director of Development Jeanne Driscoll at 212-908-4694 or jdriscoll@moaf.org

Shop online anytime at www.moaf.org/shop

A Unique Museum Shop Experience

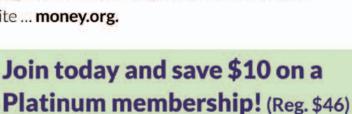


Show me the money.org

Nobody knows more about money than the American Numismatic Association. For as little as \$36, you'll enjoy:

- The Numismatist. The gold standard of hobby publications, this monthly full-color magazine is packed full of numismatic gems you won't read about any place else.
- Education. Expand your knowledge through seminars, correspondence courses, our lending library, and the ANA's new website ... money.org.
- Discounts. Members receive exclusive discounts on numismatic publications, books, supplies, collection insurance, and more.
- Confidence. ANA coin and currency dealers agree to comply with a strict Code of Ethics, so you can feel confident that you are trading with reputable firms.





Includes 12 print issues of *The Numismatist*, digital access, plus all member benefits. **(Offer valid for new members only. Expires 6/30/2016.)**

To join, visit **money.org/join** and enter code "FH" to receive the discount.

- Or call 1-800-514-2646 and reference the "FH" discount offer.
- Or send a check or credit card information (reference the "FH" discount) to:

American Numismatic Association 818 N. Cascade Ave. Colorado Springs, CO 80903-3270 Email: membership@money.org

NUMISMATIC ASSOCIATION



NOW SHOWING

48 Wall Street New York , NY 10005

www.MoAF.org

212-908-4110

Follow us on Facebook and Twitter: @FinanceMuseum



AMERICA IN CIRCULATION

A History of US Currency Featuring the Collection of Mark R. Shenkman

The Museum's new money exhibit features 250 notes spanning from the Colonial era to the present day and allows visitors to explore them in an interactive environment. Highlights include rare examples of currency bearing the signatures of signers of the US Constitution and Declaration of Independence; a complete set of notes from the Educational Series of 1896, renowned for being the most beautiful paper money in American history; and rare examples of high denomination notes including \$5,000 and \$10,000 bills.

Open Tues - Sat, 10 a.m. - 4 p.m.